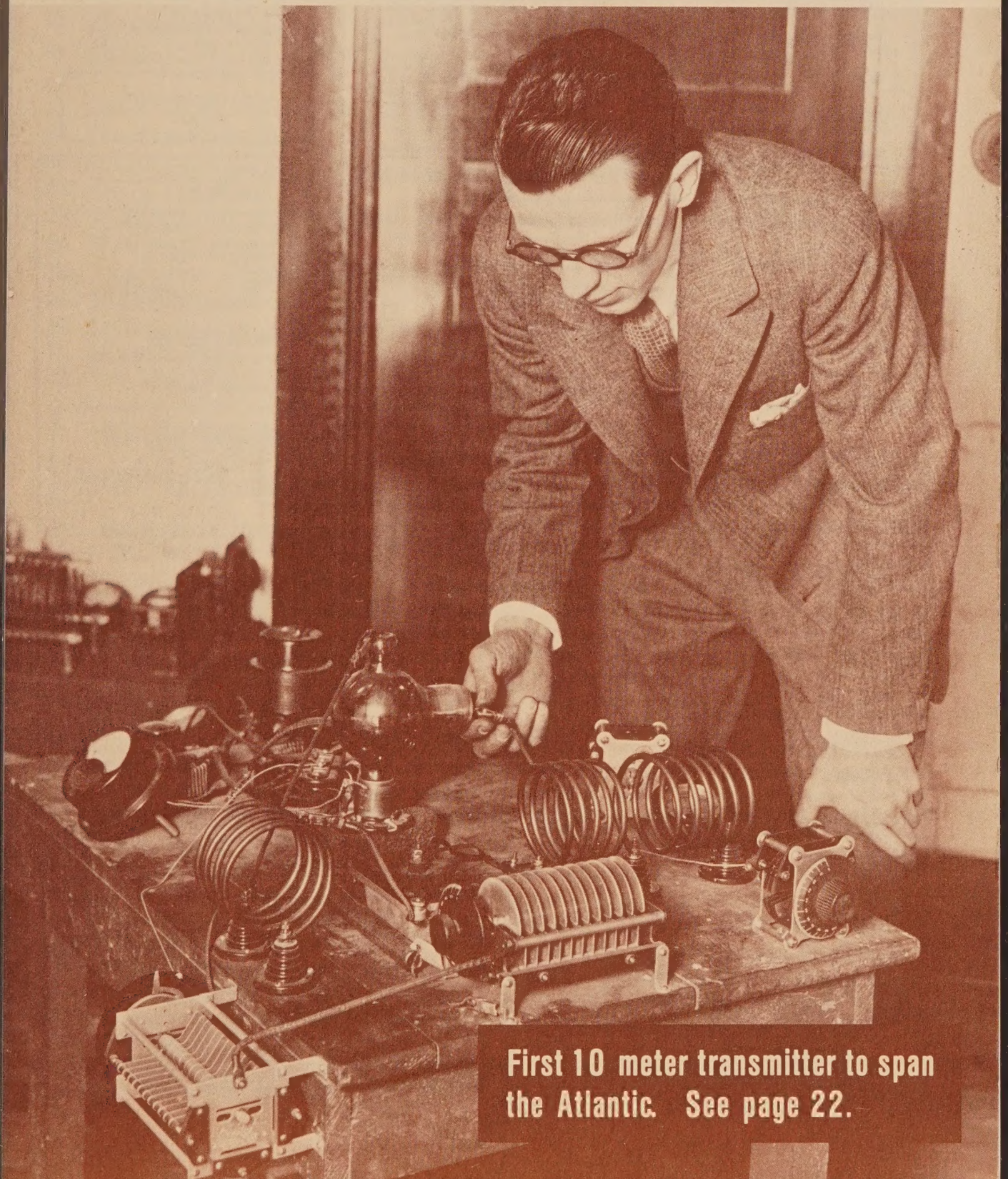
THE OLD TIMER'S BULLETIN

OFFICIAL JOURNAL, ANTIQUE WIRELESS ASSOCIATION, INC.

Published for the Old Time Wireless Operator, Historian and Collector

Vol. 22 SEPTEMBER 1981 No. 2



First 10 meter transmitter to span the Atlantic. See page 22.

Devoted to research and documentation of the history of wireless communications.

Member:
American Association of Museums
Regional Conference of Historical Agencies

ANTIQUE WIRELESS ASSOCIATION, INC.

HOLCOMB, NEW YORK 14469

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"The Old Timers Bulletin"

Editor: Bruce Kelley
Asst. Editor: Dick Ransley

The OLD TIMERS BULLETIN is published approximately four times a year at Holcomb, N.Y. by and for members of the Antique Wireless Association, Inc., a non-profit historical society chartered by the State of New York.

This publication does not accept paid advertising nor is it liable in any way in any buying or selling transaction entered into by its readers as a result of its contents. The Old Timers Bulletin is available only as part of the Antique Wireless Association membership fee and its issuance is subject to change as to frequency, content and size from time to time.

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Houck Award Chairman and associated activities.

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All business relative to amateur radio activities. Net Lists and Contests.

Change In Address?

Mail information to the Treasurer who handles current mailing list. (NOT the Secretary)

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69 BOULEVARD PKWY
ROCHESTER, N.Y. 14612

AWA NETS [EST/ESDT]

PHONE (SSB)--3866 kc. Tuesday 8 PM
Mon. - Wed. - Fri. at 9:30 AM
Sunday -- 7242 kc. 12 Noon
Tuesday-- 14270 kc. at 5:30 PM

CW -- 3584 kc. daily at 4 PM
First Wed. each month at 8 PM

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What's Coming Next!
in the "Old Timer's Bulletin"

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DeForest DV/DL Tubes
History of Bliley Crystal Co.
The SE-1420 (IP-501) Receiver
Armstrong's Super-Regen set
Collecting Wire/Tape recorders
History of Silver-Marshall Co.
The Nelson Multi-Valve
History of Cardwell Corp.
The Old HRO Receiver
Modifying the Radiola III-A
The Hammond Radio Museum
plus much, much more.....

LAST BIG EVENT OF THE YEAR!

VRPS ANNUAL CONVENTION

Nov. 6-8, Ramada Inn, Dallas, Texas
For information, send SASE to:
VRPS, Box 5345, Irving, Texas 75062

JUNIOR WIRELESS CLUB

An informal group has been formed within the Association whose interest is focused on wireless equipment and history before 1910. An informal meeting is slated at the Conference. If interested, write Headquarters.

COMING EVENTS
ANTIQUE WIRELESS ASSOCIATION

Gaithersburg, Md. Hamfest
AWA Exhibit, Sunday, Sept. 13

Gulf Coast Radio Convention
Clearwater, Fla. Oct. 3-4
AWA program and Exhibit

NATIONAL AWA CONFERENCE
Oct. 22 thru 24
Sheraton Inn, Canandaigua, N. Y.

Annual Business Meeting, Nov. 8
Sheraton, Canandaigua, N. Y.
(All members are urged to attend)

Worker's Annual Christmas Party
Nov. 21, Ionia, N. Y.
(Location subject to change.)

Notes from the President's Desk

MEMORIALS

From time to time AWA members and interested friends have made donations to AWA in memory of deceased members. We have received such memorials in varying amounts and are glad to have departed members memorialized and honored by gifts which further the purposes of AWA, to which they are devoted.

In most cases, these gifts have been made to the Museum Fund for the support of the public display of historical radio. Such contributions are tax deductible.

If, at any time, you wish to honor a departed friend in this way, send your check with suitable notation to the Treasurer. It will be appropriately acknowledged.

Up to the present time we have received gifts to the Museum Fund in honor of the late Gerald Tyne. Gerry had a very deep interest in the Museum and through the years directly and indirectly did much to augment this Fund. Mrs. Tyne wishes that any additional donations on behalf of Gerry be directed to the Museum Fund.

Charles Brelsford

ASSOCIATION NEWS

REPORT ON RECENT AWA MEETS

Reports coming in from various AWA representatives indicate another banner year for the Association.

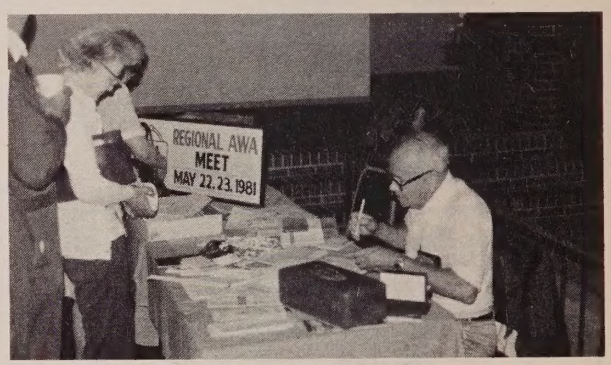
CALIFORNIA: Thorn Mayes (W6AX) reports 185 attendance at the CHRS/ AWA Foothill gathering with a Motorola vice-president as main speaker. His subject covered the companies' transition from early car radios to the semi-conductor business. A brisk flea market and well-handled equipment contest.

MINNESOTA: Joe Pavek (WØEOP) handled the usual fine gathering in Minneapolis and was pleased with the increase flea market activity. The upper Mid-West Conference has become a permanent event for members in the area.

NEW YORK: The local spring gathering at East Bloomfield had a nice turnout of nearly 100 with 80 at the noonday luncheon. Slides were shown of the Hammond Museum followed by a software auction of books, magazines, etc. The interest in this type of material was surprisingly good.

INDIANA: Ross Smith reports the AWA/ IHRS Meet at Auburn, quote, "a tremendous success with 175 registration. A Charlie Chaplin movie started the affair Friday night. Saturday had the usual swap-meet, contests, etc. An auction netted the Museum Fund over $600. A highlight of the banquet was Walt Sanders receiving "Best of the Show Award."

NORTH CAROLINA: The South-East Regional Conference was another fine example of southern hospitality with excellent programming provided by Lou Moreau, Dr. Helms, Bill Laverty, Wells Burton and others. Tail-gates dropped as early as Thursday for flea-marketing. Lew, W4DBT says the 1982 "meet" may be in Charlotte, N. C.



Checkin in at South-East AWA Conference, Winston-Salem, N.C.

REPORT ON SEMI-ANNUAL AWA BOARD MEETING

(14 officers and board members present.)

Summary of minutes

1. Treas. Cundall reported assets had increased by $3000. since last meeting.

2. President Brelsford stated land lease had been signed with American Legion and properly recorded at the County Court House (site for new storage facility).

3. A motion was made to allow the Museum Committee to de-accession selected duplicate items for sale or auction with proceeds to go to Museum Fund.

4. The Board approved funds to cover shipping costs for large items donated to the Museum.

5. Pres. Brelsford named a long-range planning committee consisting of Roland St. Louis (Chairman), Lincoln Cundall and Bruce Roloson, to investigate paid OTB advertising, membership size and other long-range subjects.

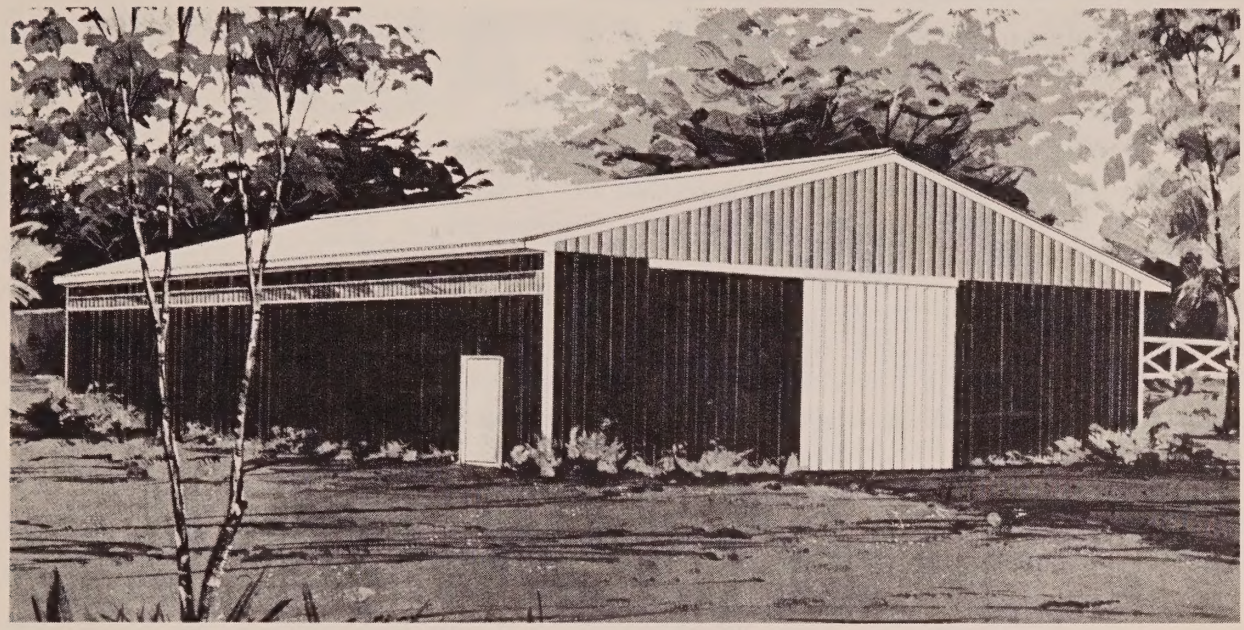
Dick Ransley, Secretary

(Current membership is now around 2500 and will soon reach 3000. Should AWA again restrict membership?)

AUCTION

Several members have indicated they may place some unusual items in the Conference Auction. Time will tell.....

ASSOCIATION NEWS



Sketch of new storage facility. The artist took the liberty of adding future trees and shrubs. Location of doors may change.

STORAGE FACILITIES

The AWA Executive Committee has signed an agreement with the American Legion to erect a large storage facility on Legion property. Completion date of the building is scheduled sometime later this fall. (See Dec. '80, page 7 *OTB*). Details on size and layout will be given in a future *Bulletin*.

In addition to housing AWA equipment, it will be a place to dispense tubes and small parts to members, particularly to radio amateurs building shortwave receivers and transmitters of the 30's.

Over the years the Association has been given a large supply of components with the understanding they were to be passed on to members building or restoring equipment. Rarer parts are reserved for restoring AWA Museum pieces; however, components for AC sets are plentiful and free. If the member wishes, he may give a small sum to the Museum Maintenance Fund.

The storage facility will also house a large library of books and magazines for reference. Hours for opening will be announced. With the limited volunteer help available, nothing will be mailed.

RESTORING OLD EQUIPMENT

Some of our younger members are finding it difficult to obtain basic information on early broadcast receivers... whether they be battery sets of the '20s or later AC receivers. Vintage Radio and Vestal Press are excellent source for books and of course we always recommend reading early radio magazines.

Bob Morgan and others sell used radio books and magazines. Here is another source of early publications including reprints: Brian Belanger, 616 Nelson St. Rockville, Md. 20850. Send a large SASE. In addition to printed material, he has a supply of old radio parts and tubes. Of particular interest is a complete reprint set of the National Radio Institute Course of 1927. A fantastic amount of information for the average person restoring old sets.

Another source of replacement parts for AC sets is: H. W. Granoff, 2445 Lyttonsville Rd., Silver Springs, Md. 20910

Send large SASE. We have not dealt with these members but can assume they are reliable since we have not received any complaints.

Looking for tubes? Send SASE with your needs to: Bill Laverty, RD #1, Box 62K, Egg Harbor, N.J. 08215

Announcing:

MARYLAND

HUGE HAMFEST

Sponsored by the Foundation for Amateur Radio

Gaithersburg Fairgrounds, Gaithersburg, Md.

SUNDAY, SEPT. 13

This event has one of the largest flea markets in the East. All items are amateur related. Be sure and visit the AWA booth where JOHN NAGLE, K4KJ will have a fine display of early receivers and other artifacts.

FLORIDA

FLORIDA GULF COAST AMATEUR RADIO CONVENTION

October 3 -4, 1981

Sand Key Sheraton, Clearwater, Florida

Special AWA program: Pan Jin, VS6BP..a historical adventure in the far East. John Smith (W4ACG) will be in charge.

NEW YORK

NATIONAL HISTORICAL RADIO CONFERENCE

SHERATON INN, CANANDAIGUA, N. Y.

Wednesday through Sunday, October 21-25

"The World's Largest Historical Radio Gathering."

Large indoor and outdoor flea markets (restricted to members with old gear). Historical talks, tube seminar, early gear contests, amateur radio meetings, old gear auction (Museum Fund), women's program, etc. For more information, see JUNE OTB or write: Dex Deeley, 8 Briar Circle, Rochester, N. Y. 14618

SPECIAL REPORT:

A most unusual feature has been added to our Friday morning Conference Program. Kaye Weedon, a native of Blommenholhm, Norway, has written that he will attend and present a program titled: "THE ALL TIME HIGH, THE MALABAR GORGE ANTENNA". Fantastic pictures of a super-power station built over 60 years ago. Much of his material is new since it is only a recent translation from the Dutch language. Kaye is an AWA member, author of vacuum tube articles and an associate of the Norwegian Technical Museum. His program is scheduled for 11:00 AM Friday.

Another overseas member who may make a special trip to the Conference is Ray Kelly from Australia. Ray has been Broadcast & Television, Public Service of Australia.

NEW MEMBERS

who are (or were) with electronic communication or industry:

Don Sutherland (ZL2AJL) Electronics Ltd., Below's Radio-Tele.. N. Z.

William Orr (VE3CRO/VE7AKY) Off. National Researh Council, Ottawa

William Kiefer (W2AQY, W3FXY) Bell Aerospace

Ralph Witsiepe (N4DH) Philco, etc.

Norman Andreotta Stat. WRSO, RCA. Dumont, Fada

W. D. Young, Stat. WNEB, Comsat

Alan Salisbury (WA2DAH) Officer U.S.A. Signal Corps

Wm. Bradford (K7EA) Chief Eng. KUTV

Charles Blair (WA2RUG) Bell Tele. Co.

Joseph Duffin (W2ROA, KC4NI, FP8AO) RCA Radar Eng.

Wm. Burlingame (WA2LVP) U.S.N. Communication

Ira Coon (WØLH, ex-9AOP) E.E. Com. Ed. Co.

John Crowe (W6ULZ) L.A. County Sheriff Radio Center

Wm. Seaby, Announcer WDON, WCEM,

Robert Behler, ASESA Westinghouse

Joseph Phillips (W2DHV/K1MUN) G.R.S., Sylvania, Bell, etc.

Louis Auerbach, U.S. Naval Lab, N.A.W.C.C.

Roland Walker (KB2TT/WA2VZF) Rochester Tele. Corp.

Robert Sarquis (W6KCA) Broadcast Station Engineer

Edgar Cowley (W6ARE) Electronics & Communication

Leonard Gessin (WA2ZNC) Police Radio, Stat. WPDR

Robert Vernon (K8LQI) Super. American Dist. Telegraph Co.

George Ashenden (W4BG/ex-1AVY) Fed. Commun. Comm., R.M.C.A.

Robert Butts (ex-W8LON) Vego Prec. Laboratories

Jim Butler NASA (Space Telemetry) Digital Equip. Corp.

Ron Jakubowski (K2RJ, ex-K3VXE) Harris RF Communication Corp.

Richard Dillman (N6VS) Chief operator of Greenpeace Foundation

Joseph Caci, McIntosh Laboratories

Brian Wickham, NBC, ABC, Stations WADO, WVIP, etc.

Will Herzog (K2LB, ex-W9LSK, KØLTU) Harris RF Communication Corp.

A. E. Ekstrand (ex-W2KL) Ship operator, Broadcast eng., Stromberg-Carlson

Kaye Weedon (Norway) Tech. writer, Assoc. Norsk Teknisk Museum

Hayden Smith (KA7GAD) Cache Communications (Logan, Utah)

Charles Simmons (W6PDH/KØMOH) U.S.A.F. Electronics

Richard Aldridge (ex-DL4DJ) Signal Corps Intelligence Office

R. J. Turner, Turner Radio Co.

Merle Lawson (KA6ET/W6YEN/W8JPJ) Stromberg-Carlson, etc.)

David Isreal, Stats. WUAG, WQFS, WGBG, WGLD, WOKX, V.P. East Cooper Com.

Mark Starin (KB2XA) Engineering, R.F. Harris Corp.

Bob Murray (Winnipeg, Manitoba) Government Artic Research Stn.

L. T. Davenport, Magic Spark Radio Museum (Australia)

DAVID GRIMES

(Letter from Bob Hertzberg)

In reference to the picture of David Grimes and myself in the June OTB, I would like to add a few comments. Grimes made quite a name for himself in the late 1920's as a circuit designer, but he was a better engineer than a business man.

He worked briefly for Pilot Radio, and then more or less re-established himself with a job at Philco. I think he held the title of chief engineer at the time World War II broke out.

In early 1942, when I was in London with the U.S. Signal Corps, I heard through the grapevine that David Grimes was coming to England on business relating to radar.

According to a subsequent report, the plane carrying him and others from the U.S. crashed upon landing in Scotland, at what is now Prestwick Airport.

There were no survivors. I felt pretty badly about this as Grimes was a fine man.

73 Bob

JOHN STONE STONE

Inventor, Mathematician, Engineer

by Myron B. Shaw

John Stone Stone is a puzzle to most OTB readers. The first time his name was mentioned in the bulletin, our printer called to ask if this was typographical error.

Fulfilling one of AWA's objectives, that of documentation, we print the following account of the life and work of this early pioneer.

Dr. Myron Shaw, of the State University of N. Y. at Geneseo, agreed to do the task. Myron is remembered for other excellent work in this field including a biography of Hugo Gernsback.

---BK, Editor

Although he remains a rather obscure figure in the history of telephony, wireless telegraphy and radio, John Stone Stone contributed most significantly to the advancement of these media. Not only was he one of the first to develop a transmitting system which made use of a radio frequency, Stone was also one of the first to demonstrate a method of modulating such a circuit by voice currents. He was also one of the first to use a radio-telephone transmitting system, the first to use the telephone to receive wireless signals, and the first to use a scientific method of preventing radio-frequency from backing up into the power circuits.

In the foreward to his book, *The Life of John Stone Stone*, George H. Clark described Stone as "a great mathematician and physicist, a great analyst and inventor, but much more than this: he was a great man and a great gentleman."

Another who greatly admired Stone was Dr. Lee DeForest. In mourning Stone's death in 1943, Dr. DeForest stated, "*No one in the long history of pioneers of wireless could compare with Stone in clear-sighted mathematical analyses of the basic principles on which the science of radio is founded.*"

Born in 1869, John Stone Stone was descended from a long line of patriotic, intellectual and cultural men and women. His father's ancestors were among the earliest settlers of what is now New England.

Developing an early interest in mathematics, Stone attended Columbia University for two years before transferring to Johns Hopkins in 1888 where he undertook advanced study in mathematics, physics, and theoretical and applied electricity. During his final summer in Baltimore, he assisted the Bell Telephone engineers at the Paris exposition. A year later, Stone was hard at work on the new problem of electrical resonance as a member of the experimental Department of the Bell Company in Boston.

In February, 1891, Stone began work on a method to increase the efficiency of telephone lines by increasing the inductance of the line. He also devoted considerable attention to the influence of iron in the cores of induction coils used for telephone purposes. Stone discovered that if the inductance was increased and the resonance-balancing capacity reduced, the disturbance could be reduced to a marked degree. This principle was instrumental in Stone's later work in wireless telegraphy in the form of "*swamping inductances.*"

Powered by an alternating current generator giving seventeen alternations per second, Stone's first wireless transmitter fed an oscillating circuit consisting of a discharger, a condenser, and the primary of a high frequency transformer. His consuming interest in high frequency investigations forced him to choose between that and telephony so John Stone resigned from Bell Telephone in 1899, remaining as a consultant in patent causes.

By late spring of 1900, he had theorized a process of selectivity in wireless by which a sending station could be tuned in conjunction with a receiving station so the message could be received without interference. With the aid of some devoted friends and associates, the Stone Wireless Telegraphy Syndicate was founded on December 13, 1900.

One of the most perplexing problems of interference Stone faced were the uncontrollable radiations due to atmospherics such as flashing from trolley wheels. He sought to eliminate this interference through the production of pure simple-harmonic electro-magnetic waves at the transmitter.

Having translated his mathematical researches into laboratory certainty, Stone needed a company to breathe life into his inventions by manufacturing the apparatus associated with them. On July 30, 1902, the Stone Telegraphy and Telephone Company was incorporated in the State of Maine with a capitalization of ten million dollars.

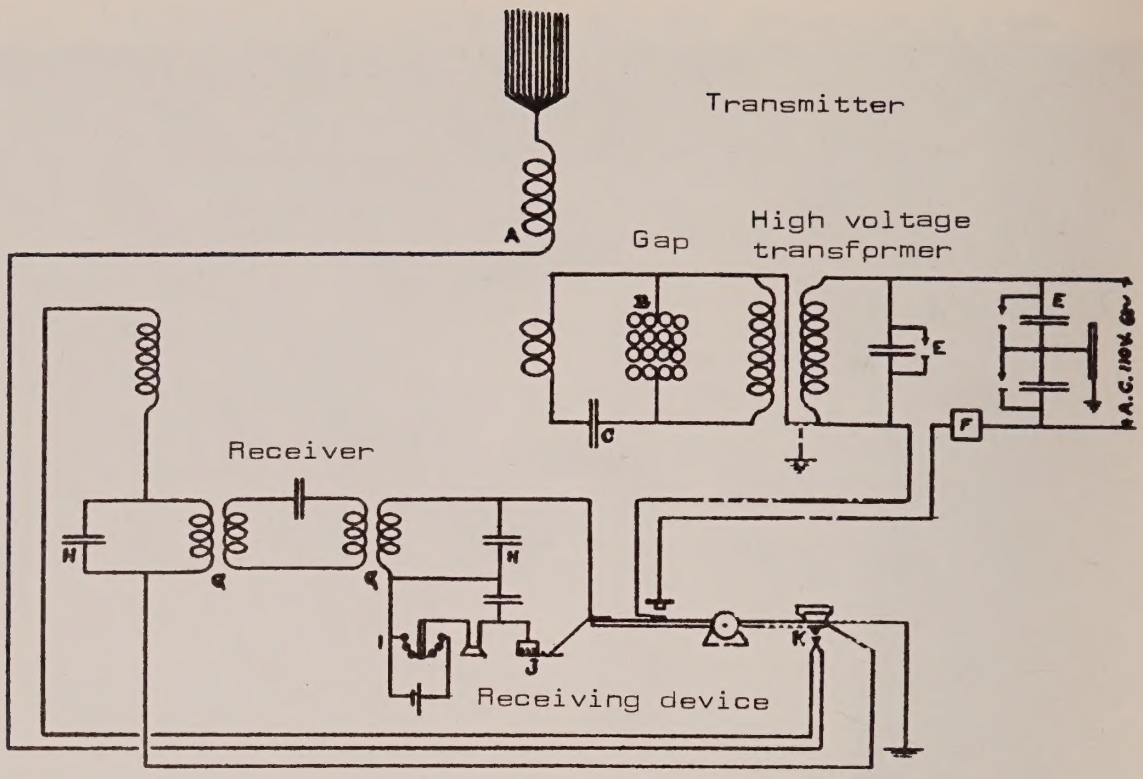
Among Stone's most significant inventions was the wave meter, which permitted a turn-by-turn and inch-by-inch calibration. Realizing the advancement of his equipment, he needed a station on which to test it.

Located in Lynn, Massachusetts, Stone's station received its first message on November 29, 1903, from Cambridge, about fifty miles away. The message said simple, "*There is a Stone in every date.*" With this receiver and the acid detector, the Stone Company moved from a purely experimental state into a crude form of commercial design which worked very well.

Another milestone in the John Stone Stone saga was achieved on May 31, 1905, with the completion of the installation in the Boston Navy Yard of the first oscillation transformer built by the Stone Company. Three months later, Stone equipment was installed at the Portsmouth, New Hampshire Navy Yard. That same year, Stone ventured for the first time into the commercial arena with a station on the Isle of Shoals, and in reporting the Roosevelt Cup yacht races off Halfway Rock, Marblehead, Massachusetts.

Rare picture of John Stone Stone as a young man. Most pictures are of an older man with round frame glasses.

[Continued on next page]



Circuit of Stone's 1905 Naval installation at Portsmouth, N.H. A picture of the station may be found in Robison's 1906 Manual of Wireless Telegraphy for Naval Electricians.

Also in September, 1905, the Stone Company made its first naval ship wireless installation on the USN Lebanon, a derelict-destroyer.

By 1907, the Company began to systematize is drawings and instruction books, one of the first steps toward attaining its wireless majority. Emphasis was placed on receivers with Fred Kolster assigned the task of improving their design.

A most significant advancement occurred the following year with the development of the Company's 15,000 watt transmitter for the New York Navy Yard. Despite the promise of a most rewarding future buttressed by large Navy contracts, the Stone Company soon faced financial chaos. When the Navy observed the "*quenched*" gap wireless system of a German engineer by the name of Seibt, they adopted it at once. On May 28, 1913, a receiver's sale of the Stone Company's properties was held.

John Stone had settled in New York City in 1911 as an independent consultant and expert in patent causes. In 1908, he had founded the first wireless technical association in the United States, the *Society of Wireless Telegraph Engineers*, which evolved to the *Institute of Radio Engineers*.

Although his delicate health prevented him from serving in World War I, Stone was instrumental in organizing the radio men of the country and in serving on the Defense Committee.

His health worsened, and in 1919, when he was called to his Mother's bedside in San Diego, he decided to remain with her. Between 1919 and his death in 1943, Stone accomplished some of his most outstanding work. His approximately thirty-one patents include those involving relaying, simultaneously transmitting and receiving, increasing persistency, and directing space telegraph signals. His Canadian patents include improvements in the following: apparatus for selective electric signaling, methods of receiving space telegraphic signals, methods of relaying space telegraphic signals and space telegraphy.

A more personal glimpse of this most complex gentleman is revealed in a letter to his biographer and colleague, George Clark, in 1933. "*As you probably know, I have been associated with the Development and Research of the American Telephone and Telegraph since 1920, choosing my own place of residence and subjects for research and invention. I use and need no laboratory because I prefer to conduct my researches, and test the validity of my inventions, by mathematical analysis. . .For twelve years I have been the apostle of short wave radio in the Department of Development and Research. At first, of course, I was a prophet howling in the wilderness, but that stage soon passed as short waves came into their own.*"

John Stone Stone was not only a true prophet of radio, he constantly demonstrated highly laudable characteristics which Dr. DeForest captures for us. "*Stone's theoretical analyses were classics of insight and clarity of exposition. His language was precise and elegant in expression, for even his patent specification could be classed as literature.*"

Endotes

1. Clark, George H. *The Life of John Stone Stone.* San Diego, California: Frye & Smith, 1946.
2. *Ibid.*
3. *Ibid.*

Members have asked about Gernsback's Electro-Importing Co. What better way to tell than to reproduce page 3 of his 1914 catalog as shown below.

IF YOU DON'T KNOW US—THIS WILL TELL YOU

The Electro Importing Co. was born in 1904 at No. 32 Park Place, New York, in a little office 10 feet square. At that time we were the only and original concern in America selling solely experimental electrical goods.

The first amateur wireless outfit in America was made and sold by us, and the writer, the pioneer in Amateur Wireless, is not without good reasons called: **"The Father of Amateur Wireless"** by his many friends and followers.

We grew rapidly—not because we had the goods to sell, but because we gave everybody a square deal, and in 1905 we moved to larger quarters at 87 Warren Street, where we had better manufacturing facilities.

Early in 1908 we again had outgrown our facilities and moved to 80-82-84-86 West Broadway, with six times as much floor space as before.

These quarters in less than one year proved inadequate, and as we were cramped for office and factory space, we opened a retail store at 69 West Broadway in 1909, where we could take better care of our local trade and at the same time give better service to our many city customers. This store to-day is the Mecca of all local Wireless "fiends" as well as visitors. In its kind it is the most unique store in New York.

In 1910, when conditions became intolerable, when every inch of floor, wall, and even ceiling space was at a premium, we looked around for a new home and moved to our own 5-story building at No. 233 Fulton Street, which we now occupy from basement to roof.

Although we have here over 15,000 square feet at our disposal, we again became cramped in 1912, and we had to take the building next door to us, thus almost doubling our floor space.

It must be plain to anyone that there must be a good reason for such a growth. There is no secret about it. The answer is: **ENORMOUS VALUE FOR THE MONEY, AND THE FAMOUS E. I. CO. SQUARE DEAL.**

This means that your dollar will go twice as far when spent with us than with any other electrical house in the U. S. Also, as everyone knows, the **E. I. CO. ALWAYS MAKES GOOD.** That's the key of our success.

Our mail in 1912 averaged above 900 pieces of mail daily. We receive and ship 300 orders each day. We control more patents on experimental and Wireless apparatus than any other concern in America. We manufacture and handle more such material than any other of our competitors.

We buy our raw material by the ton and carload, where our competitors buy in pound lots. Do you wonder that our prices are from 25 to 50 per cent. lower, and that we give you superior goods on top of it?

Our trademark: **"Everything for the Experimenter"** is not an idle phrase. Ninety per cent. of our customers are experimenters, and our international reputation as **"THE electrical mail order house"** is well founded. There is not a civilized country on the globe where our instruments are not known.

We realize more than anybody else that the average experimenter's pocketbook is not overfed, and our prices are accordingly. We could easily get twice the amount for some of the articles, but our policy has always been to make a very small profit on a large amount of goods, thereby invariably giving the customer the benefit.

In closing let us add a word to the wise. If you pay more for goods, such as we list, **YOU ARE GETTING ROBBED.** If you are paying less, you will unfailingly **PAY MORE,** for you are positively getting inferior material, which you must replace later.

WE DO NOT SELL GOLD BRICKS, WE CANNOT AFFORD IT.

THE ELECTRO IMPORTING CO.,

H. GERNSBACK, PRESIDENT.

What year were these sets made ?

THE NOVICE COLLECTOR AND HIS FIRST SET

The novice collector usually asks two questions when he finds an old broadcast receiver: "What's it worth -- and when was it made?" The first is pointless since there is no direct answer... it's worth whatever you can get for it.

The year a set was made can be determined with a little more accuracy. Some Rider Manual spec sheets actually have a date. A sales brochure and sometimes a technical sheet has a year hidden somewhere in a code such as: Brochure No. 5320. The year is 1932.

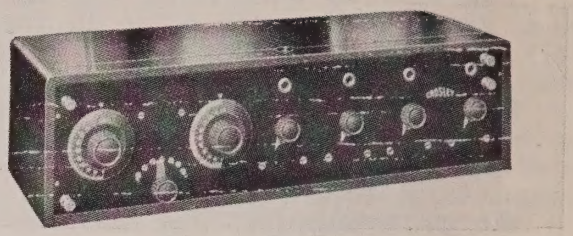
Other sources are early radio magazines, which have product reviews and ads, and radio catalogs, which are also dated.

When all else fails, the approximate year can be determined by examining the tube lineup. Most manufacturers designed their receivers around the latest released tubes-- for sale purposes and efficiency.

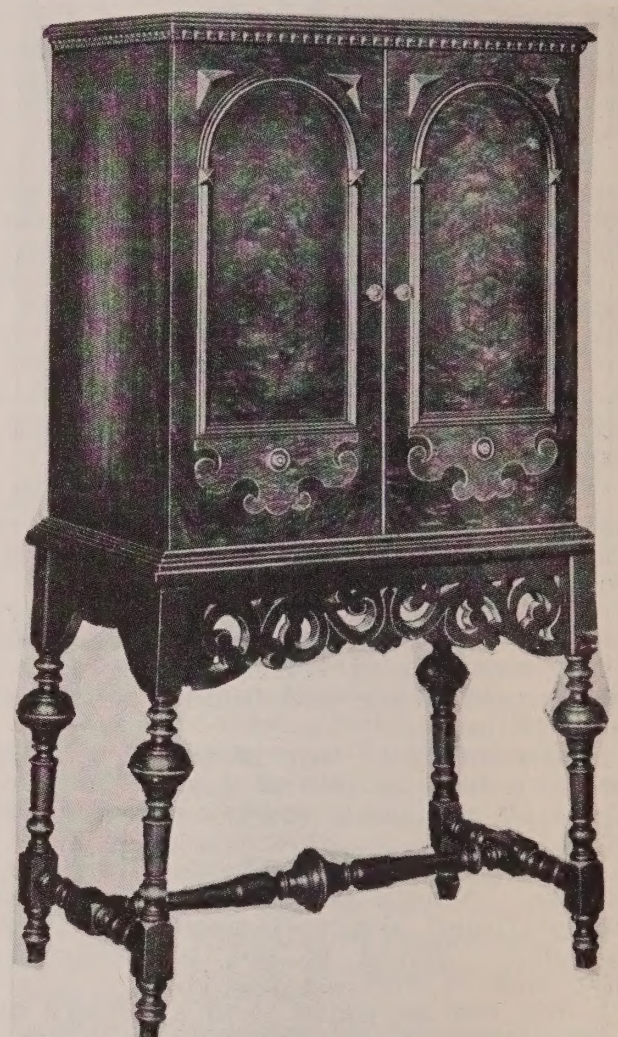
Printed below is a list of the more common tubes released by RCA in the '20s. Note the type tubes in your receiver, check the release date, add one to three years and you'll be somewhere in the ballpark.

Type	Release date	Type	Release date
UV-200	1920	UX-213	1925
UV-201	1921	UX-216B	1925
UV-201A	1922	UX-222	1927
UV-216	1921	UY-224	1929
UV-202	1921	UX-226	1927
UV-201A	1922	UY-227	1927
UV-199	1923	UX-199	1925
WD-11	1922	UX-112A	1927
WX-12	1925	UX-171A	1927
UX-120	1925	UX-280	1927
UX-200	1925	UX-281	1927
UX-200A	1926	UX-240	1927
UX-201A	1925	UX-250	1928
UX-210	1925	UX-245	1929

A set manufacturer, as a rule, didn't design sets around tubes that had been on the market over three years. For example, the 226 tube, released in 1927, was obsolete by 1931.



The first popular broadcast receiver [excluding the crystal set] was the regenerative detector followed by one or two stages of audio amplication.



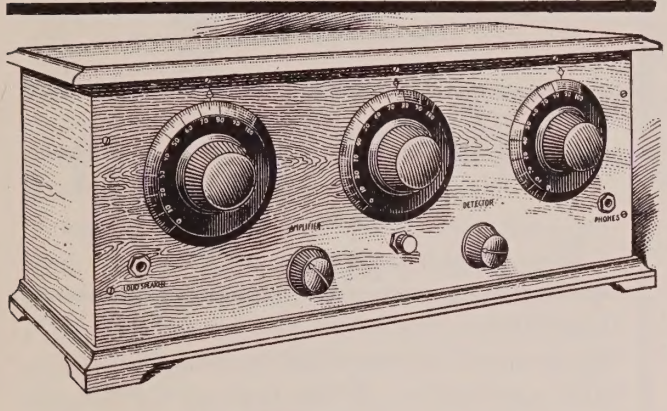
Consoles started to become popular in 1927 with the high-boy model, easily recognized by its long legs. By the mid '30s, the high-boys were replaced with legless models.

There are always exceptions. The 280 or 80 rectifier, released in 1927, was used well beyond the mid '30s. The same

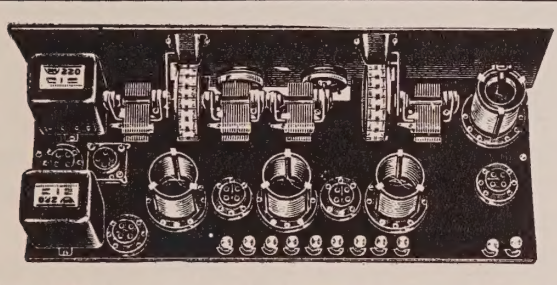
[Continued on next page]

holds true with some transmitting tubes. The 203-A, released in 1923, was still used in 1935.

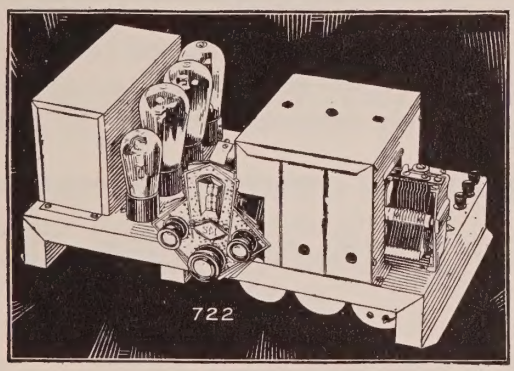
Another method to date a set is by tube socket. Early battery sets with UV sockets are of 1925 vintage or before.



The 3-dial TRF sets were popular from 1923 to 1927.



By 1927, it was popular to "gang" the tuning condensers in both TRF and superhets. There was also a trend to mount components on an all-metal chassis.



Toward the end of 1928, most receivers were single dial controlled and the superheterodyne circuit was becoming popular.

As mentioned earlier, circuit design is also a good indicator. The good old 3-dial TRF sets had their heyday between 1923 and 1927. After that, single dial control took over, etc..Good luck!

--Robt. Allen

(In a future OTB, we'll discuss identification of 1930-40 receivers.)

VINTAGE RADIO BOOKS

ARE AGAIN AVAILABLE !

A FLICK OF THE SWITCH 1930-1950

Here's your time trip through the great days of radio broadcasting and the dawn of television. Revisit the Lone Ranger, Philco "cathedral" radios, old "Ham" days and many more. You'll revel in 312 pages of story, old ads and over 1,000 pictures.

HARD-COVER $12.95 HANDBOOK $9.95

VINTAGE RADIO 1887-1929

You'll enjoy this fascinating pictorial story of pioneer days in wireless and radio. Relive the days of Marconi, old spark transmitters, and the struggles of early radio broadcasting. It's the radio collector's reference, with over 1,000 pictures on 263 pages.

HARD-COVER $12.95
HANDBOOK $9.95

MOST-OFTEN-NEEDED 1926-1938 DIAGRAMS

This reprint of Morris Beitman's Supreme Publications book shows circuit diagrams for 600 radio models. Its 240 pages are valuable for historical circuit information, and are great aids in restoring those old sets. Made from Supreme's original artwork, it is clear and readable.

WHILE THEY LAST!

HANDBOOK $9.95

CIRCUIT DIAGRAMS

We will research any pre-1951 radio model and send you the circuit diagram and any other available repair information. We'll also tell you the year in which that model was introduced. Your money back if we don't come up with at least a circuit diagram!

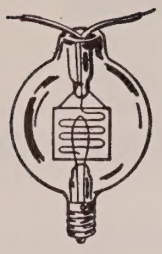
ANY RADIO MODEL $3.50

COLLECTOR'S GUIDE 1921-1932 RADIO

This book makes you an "instant expert" as you go prospecting for those fine old radios. It eliminates guesswork in determining a set's age and "pedigree." There are 264 pages loaded with over 50,000 facts on 9,000 radio models made by 1,100 manufacturers.

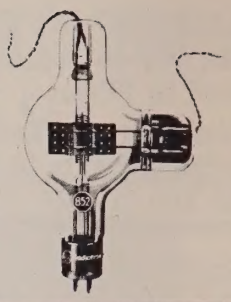
New 1981 Edition: $9.95

Send check or MO to: VINTAGE RADIO
Box 1331, North Highlands, Calif. 95660



THE TUBE COLLECTOR

Conducted by Lauren Peckham



SYLVANIA TUBES- - STILL GLOWING

Dave Bechtold, W3DB

Those like me who are not tube collectors, and who try to keep up with electronics, have generally considered solid-state to be "in" for the last twenty years or so, and tubes to be "out". And for some time now, I've tended to apologize for the tube-type gear I still operate daily in my ham radio station. So, I was a bit surprised in conversation with Med Ostrum, Manager, Production Planning, of the Sylvania tube plant in neighboring Altoona, Pennsylvania. We were at a Boy Scout Council Board meeting, and he happened to mention that they had just received an order for 30,000 6L6's. I was interested to know more.

Are tubes still *that* popular? It turns out that they are, and Sylvania in Altoona, and one other company in Kentucky, are the surviving manufacturers of small tubes in the USA. True, usage is gradually declining, both in numbers and types produced, but the Altoona plant turned out a hefty 10,500,000 tubes in 1980, and looks forward to many years of good business ahead as production is concentrated there.

Sylvania started making tubes in the early 1920's. With the burgeoning demand for tubes at that time, it was a natural offshoot from their several existing incandescent lamp manufacturing operations. From their new plant at Sylvan Emporium, Pennsylvania, Sylvania Products Company made its first shipment on October 11, 1924. It consisted of 100 of the already popular 201-A's at sixty-five cents each for S. H. Kress & Company, 114 Fifth Avenue, New York, N.Y. From that beginning, Sylvania's success made them familiar history as they grew and integrated their operation from raw materials to final consumer products.

Along the way, Sylvania became part of the General Telephone and Electronics Corporation (GTE) and, just recently, the consumer products divisions, including the Altoona small tube plant, have been acquired by the Holland-based world-wide Philips ECG organization. Thus, over 3,000,000,000 green boxes later, Sylvania tubes are still around (now with yellow boxes) and doing well.

I pleasantly remember Sylvania for more

Spec sheet for Sylvania's first product:

The SX-201A tube.

The date:

October, 1924

Sylvania

REG. U. S. PAT. OFF.

"SET-TESTED"

Radio Tubes

SX-201-A DETECTOR AND AMPLIFIER

Filament Volts	5.0
Filament Amperes	.25
Plate Volts	20 to 135

Grid biasing or "C" voltages should be used as indicated below

PLATE VOLTAGE	NEG. GRID BIAS
67 Volts	3.0 Volts
90 Volts	4.5 Volts
112 Volts	6.0 Volts
135 Volts	9.0 Volts

ANY TUBE WHICH IS BELIEVED DEFECTIVE SHOULD BE RETURNED FOR ADJUSTMENT TO THE DEALER FROM WHOM IT WAS PURCHASED.

CAUTION!
DO NOT USE EXCESSIVE FILAMENT OR PLATE VOLTAGE
HANDLE TUBE CAREFULLY

MANUFACTURED BY

Sylvania Products Company

EMPORIUM, PENNA.

[Continued on next page]

than just their tubes: Like the abundance of pretty girls who worked at the Emporium, Pennsylvania, plant back in the mid 1930's. As an EE student at Cornell University, our prof in Electronics II took us there on a field tour. Those smiling young ladies completely upstaged the manufacturing processes we were supposed to observe. (Emporium now make only T-3's and Nuvisters.)

Remember the lock-ins, and the Type 38 for mobiles that needed only 6.3 volts to operate? Sylvania was truly innovative.

Another memory highlight of Sylvania goes back to WW II in Europe: I could well owe my life to Sylvania's timely development of the VT Fuze tube -- a radio proximity fuzed anti-aircraft weapon. That tiny T-3 tube, fitted in the nose of an anti-aircraft shell, detonated the shell when it merely passed close to a target. This was a vast improvement over timed fuzes, and those needing direct target contact. It was to anti-aircraft what the Bazooka was to anti-tank warfare. It was my good luck to see first hand the quantum jump in ack-ack effectiveness brought about by that little Sylvania tube -- but that's another story.

Incidentally, the earlier mentioned order for the new 6L6's went to a hi-fi firm which still makes new tube-equipped stereos for purist customers who contend that solid-state can't match tubes for best audio fidelity. I don't feel so out of it with my old tube ham gear after all--

WUNDERLICH TUBE

Walter Smartt calls our attention to the fact there were actually four (4) versions of the Wunderlich tube noted on page 20 of the March OTB. The article stated two: a 2.5 and 6.3 volt type. Checking through his tube files, Walt found the following variations all with a 6-prong base.

1. Wunderlich "A" -- 2.5 v. fila. with cathode cap connection.
2. Wunderlich "B" --another 2.5 v. filament tube but with screen-grid cap connection.
3. Wunderlich "A" Auto -- 6.3 volt version (no cap connection).
4. Wunderlich "A" -- same as No. 1 except no cap connection (similar to No. 3)

In Memoriam

GERALD F. J. TYNE

Word of Gerald Tyne's death reached us too late for more than a brief notice in the last Bulletin. There is more to tell.

Gerry had circulatory problems with other complications and had been critically ill for several weeks before his death in April at the age of 81.

Gerald Tyne was acknowledged a leading authority on vacuum tube history and development. His book, "Saga of the Vacuum Tube," is the bible for the radio historian/collector.

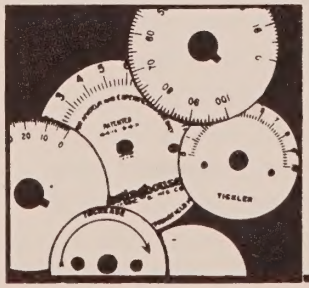
A graduate of Rensselaer Polytechnic Institute, he taught at the school from 1921 to 1929 at which time he joined the engineering staff of Bell Telephone Laboratories. After retiring in 1965, he spent several years here and in Europe tracing the evolution of the vacuum tube. From this careful research came the "Saga".

The recipient of numerous awards and personally acquainted with many leaders in the field, Jerry was a frequent contributor to AWA and conducted a historical tube column in our Bulletin.

His contributions are of immense signifigance and have set a high standard for research in radio history.

MARKETPLACE

Several AWA members provide excellent reproduction parts for restoration/replacement in early battery receivers. Keith Perry (17557 Horace St., Granada Hills, Calif. 91344) and Roland Matson are excellent sources. Roland writes he now has available Crosley book condensers, Radiola V crystal detectors, some new A-K variometers and other hard-to-find items. Send SASE (or phone) your needs:



Roland Matson's

ANTIQUE RADIO PARTS SUPPLY

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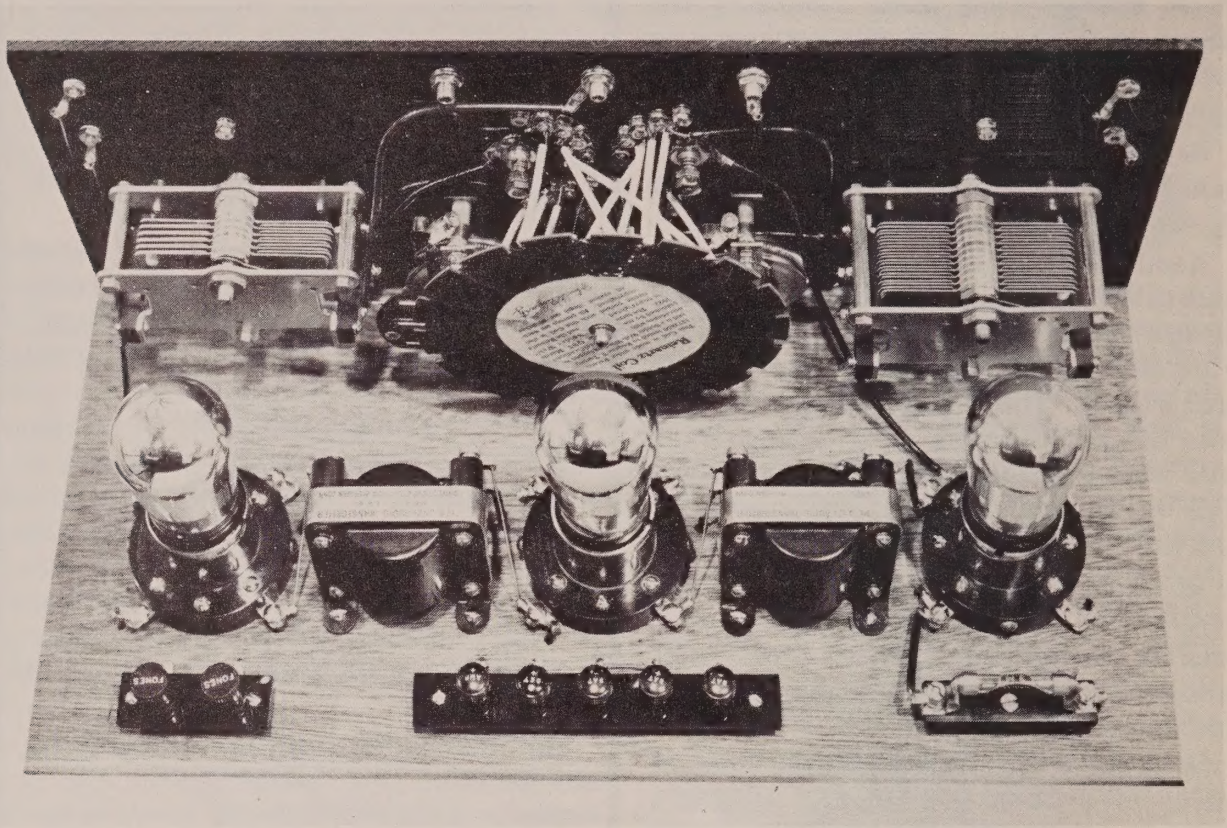
Bedford, Mass. 01730
(617) 663-3877

THE AMATEUR BUILDER



Reinartz tuner with two stages of audio. Later vintage parts are used where earlier ones could not be found. Note spiderweb coil in center.

BUILDING A REINARTZ TUNER

Years ago, I vowed that when I had a small radio museum, I would build a receiver using the Reinartz spiderweb coil since it would fit in so well with all the other inductances on display. The day is here in the form of the Tuner shown in this article.

The circuit used is from the "Improved Reinartz Tuner" article in March, 1922 QST magazine... to which I have added a 2nd stage of audio. This Reinartz spiderweb coil covers the broadcast band. Radio amateurs used one with less inductance to cover lower wavelengths. Hence, some of the copy in the QST article does not apply.

Using this circuit, I have come up with a good performer. Good volume and selectivity were anticipated for both earphone and speaker reception, and I was not disappointed. There were a few problems such as finding shorts in the original copper enameled coil, making it necessary to re-wind it.

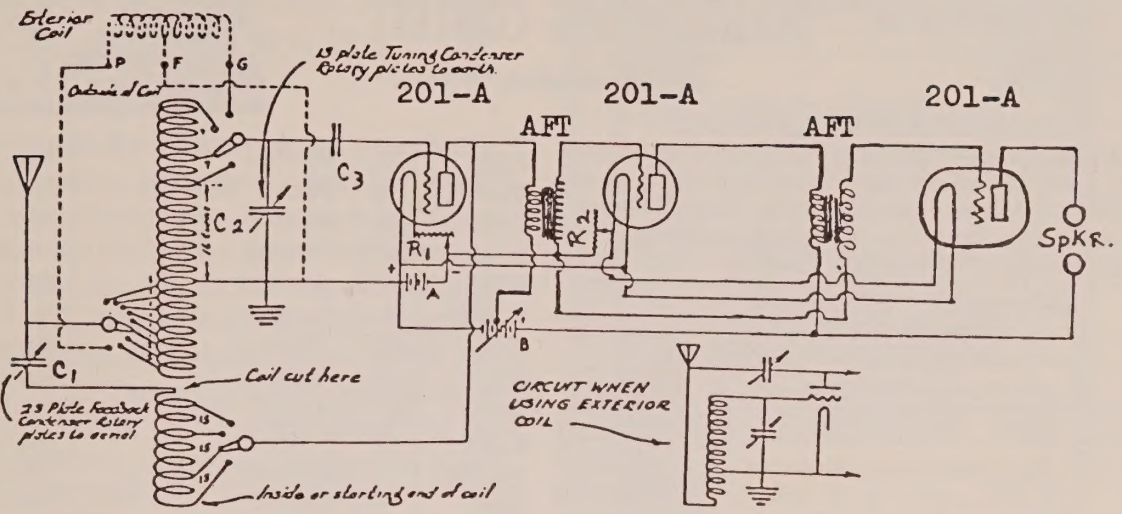
Here are the changes in addition to the 2nd audio stage: 2 meg. gridleak from det. grid to ground (A+), filament

[Continued on next page]

PARTS LIST

1 Reinartz spiderwed coil
3 Tap-switch assemblies
[8 point for primary]
[4 points ea. for sec. and feedback]
2 Cardwell var. condensers
C_1 .0005 C_2 .00025
2 Connecticut AFTs [1 to 4]
2 Cutler-Hammer rheostats
[R_1 3 ohm, R_2 6 ohm]
1 Yaxley filament switch
3 General radio tube sockets
1 .00025 mfd. grid cond. [C_3]
1 2 meg. gridleak and holder
3 UX-201A tubes [Note: orig. set used UV-201's]
3 Banana jacks for exterior coil
11 Eby binding posts

[Continued from previous page]



THE IMPROVED REINARTZ TUNER

switch in A+ side, and phone leads across the primary of the 2nd AFT. These changes are not shown in the schematic.

A special thanks to Warren Green, W7JY and Maurice Stahl for their assistance in this project.

---Floyd Lyons, San Francisco

Quick reference to:

RECENT ORIGINAL ARTICLES

of interest to radio historians

"Measuring Speaker Motion with Laser" Audio, Aug. '81. Includes brief resume of loudspeaker work by Rice & Kellogg in '20s.

"The IP-500/SE-143/SE-1220 Receiver" SCARS, Apr. 1981

"Solid-State Devices above 100 GHz." (Brief history of microwave development) Radio-Electronics, June '81

E. H. Scott and His Radio (History of pioneer receiver manufacturer) N. Z. R. S. May, 1981

"Building a 1933 160 Meter Transmitter" Ham Radio, June '81

"Roots of High Fidelity Sound" (Development of modern phonograph record) Audio, June '81

"Aerial Heirlooms" (Brief history of Maronic Antennas) "73" July '81

"50 Years of TV" (History of early CBS W2XAD) Audio July '81

"Birth of Postal Telegraph Co." (Excellent story of an early telegraph company.) MTC Dots & Dashes June '81

Note: As of early July, few club papers have been received for review. I hope this isn't a sign they have stopped publication.....Ed.

AWA LOGO

There may be good reason for the Hertz Resonator (AWA Logo) found on an early Zeiss Ikon camera (Mar. '81 OTB). Dick Aldridge, who spent several years in Germany following the War (in the Intelligence Service) has a theory.

He tells us that Carl Zeiss started his factory in Jena, Germany, in 1846 manufacturing microscopes and eventually cameras. In 1866, he formed a partnership with Ernst Abbe, who had an interest in electro-magnetism.

During the Franco-Prussian War of 1870-71, they manufactured telegraph equipment. When Zeiss died in 1888, Abbe became sole owner of the Zeiss Works.

According to Aldridge, Heinrich Hertz worked on some the electro-magnetic wave experiments with Abbe. This may have influenced him to use the resonator symbol. The company manufactured electrical items as well as optical products during both wars.

WRITING AWA ? Send SASE for prompt reply....

RESULTS OF OLD TIME ●●●●● ●●●● TRANSMITTING CONTEST

by Ken Gardner, W2BGN

SUMMARY OF EQUIPMENT USED

12 stations used 210 tubes in their transmitters and 25 had National receivers with the HRO the leader. See page 14 of June OTB for general comments.... and start preparing now for the 1982 OT CONTEST...

Abbreviations for summary:
x-crystal control, eco-electron coupled oscillator, mo-master oscillator, pa-rf power amplifier, pp-pushpull

CALL	Pts.	TRANSMITTER	RECEIVER
K4TS	976	Meissner SS/pp Tz-40 100w.	Pr-15 and Super-Pro
W2LV	960	Eco/6V6's/813, 250w.	Nat. HRO
W2HYN	868	59x/210/211, 300w. (80) 6v6x/6L6/811, 80w. (40) 76x/6L6/pp809, 170w(20)	Nat. HRO
W1DM	808	VT2mo/VT2/211A 150w.	PpVt-1 det. Vt-1 osc. Vt-1, 216A
K2LP	714	6L6x/807/860 150w. Mod. on 20 and 40	Nat. HRO
W2LC	646	6AG7x/(3)807 Pa. 140w. Mod. on 20m.	HQ-120 Mod.
W2AN	588	6L6x/6L6/TZ40 50w.	HRO/SW3
W2BGN	560	205Dmo/(2)205D, WE211D 100w.	Nat. HRO
W3DB	488	211C Hartley 75w. Mod. on 20m.	German E-52
W8VSK	416	Modern	NC-101X
W4NM	376	59x/(2)46 40w.	NC-101X
W3HWT	316	Hallicrafter Ht-6 25w.	Superwasp
W2AFE	312	210x/210 pa. 50w.	SkyChamp.
Ve3BDV	294	6L6x 8 watts	NC-101X
W1BVL	244	6AG6eco/807/814 200w.	Modern
W2FW	244	210TNT 15w., 210x/210	Nat. FBXA
W3QA	244	RK-20 Tri-tet 25w.	Modern
Ve3AFW	218	802mo/(4)814pp/p 400w	Mod.
W8BFD	196	59xtal 7 watts	Nat. HRO
Wb4JGZ	194	Modern	Pat. PR-16
Wa3MAS	190	6L6x 20w. & Mod.	6F8 reg. Nat. HRO
W5KL	184	245x/210 30 watts	Nat. SW3
W7KE	184	Modern	Modern
W9DZG	182	Modern	Nat. HRO
W3VVS	180	Meissner SS 7 watts	Nat. HRO
K2NP	172	Modern	Nat. FB-7
N4EE	172	Modern	Bretting 12
K8VBL	168	47x/10/pp10 20w.	Nat. 101X
W2AAU	167	Modern	Modern
VE4ZX	166	Modern	SX-28
W3INV	144	WE205-D TNT 6w.	Nat. AGS
W4DBT	132	Modern	Modern
K4DE	132	47x/210 18 watts	Nat. FBXA
WØFXY	128	Modern	Sky Champ
AD1E	124	Modern	Nat. HRO
K4IM	114	Modern	Nat. HRO
Wa9VLK	106	807xtal 30 watts	SX-117
W8SS	105	Modern	Modern
W7LIX	103	Modern	Hall. S-20R
K2IC	102	Modern	Modern
W2IEG	98	Modern	Nat. FBXA
W6CG	97	Modern	Modern
KE2O	92	Modern	Modern
W1MB	90	210TNT 12w.	Nat. SW3
K2RY	88	45 Hartley 9 w.	Modern
W9GFS	88	45mo/46/10 40w.	Modern
AI4P	71	Modern	Modern
W3DUG	62	Modern	Modern
K4CTG	62	Modern	Modern
J3AAC	60	Modern	Modern
W4AWS	57	Modern	Modern
W8EGF/7	52	Modern	Modern
W1AB	51	Modern	Modern
W8AQ/4	51	Modern	Modern
W6NNV	49	Modern	Modern
W2ARX	48	Modern	Modern
W2GB	48	Modern	Modern
W4HII	45	71Ax/205B 15w.	99det, 99aud
N3VT	42	Modern	Nat. HRO
W9HE	39	Modern	Modern
W2ZUX	37	Modern	Modern
Ve3MJH	36	Modern	Modern
VE1OC	32	Modern	Modern
K6ARE	30	Modern	Modern
W4AIW	29	Modern	Mode rn
W2VW	24	Modern	Modern
W7LOG	22	Modern	Comet Pro
W1BPI	20	Modern	Modern
K9HE	17	Modern	Modern
W3RG	17	Modern	Modern
W2OWF	15	Modern	Modern
K4JO	15	Modern	Modern
Ve3AUI	15	Modern	Modern
W2EJ/7	12	Modern	Modern
W9SG	11	Modern	Modern
Wa2TLR	9	Modern	Modern
K6RTU	8	807xtal oasc. 50w.	HQ-120
N9TT	6	Modern	Navy TRF
W2RFY	5	Modern	Modern

SOME HAD ANTENNA PROBLEMS

CODES ON STAMPS

by D. K. deNeuf, WA1SPM

As any seasoned philatelist can tell you, the depicting of simple telegraphic codes on postal stamps issued years ago was not especially a rarity. But one of the most interesting stamps to appear, and which caused some confusion amongst even experienced communicators was the 5 yen stamp reproduced above which was released by the Japanese postal authorities on October 6, 1954. This commemorated the 75th anniversary of Japan's joining the International Telecommunications Union.

Those communicators who had forgotten about the old Japanese telegraph code were puzzled by the top strip of tape from an old telegraphic ink register. in that code it reads "*KO-KU-SAI*" - the Japanese word for "*International*".

On the right side, running from top to bottom is a strip of "*Wheatstone*" perforated transmission tape in the same code, which reads "*DENKI*" - meaning "*Electrical*" in Japanese.

On the bottom of the frame there appears a real brain twister for many. It is a strip of 6-unit Japanese teleprinter tape which reads "*TSUSHIN*" ("communications"), followed by "*RENGO*" ("union") and "*KAMEI*" ("accession"), and then 75 "*SHUNEN*" ("years"). (The Japanese at that time used a triple-shift teleprinter keyboard which facilitated the transmission of the full set of Roman letters and the Arabic numerals, plus the 48 "iroha" (ABC) extremely simple Japanese phonetic characters. The full Japanese written language includes many Chinese "*Kanji*" ideographic characters made up of some 1300 symbols. Modern Japanese teleprinters are capable of transmitting most of these characters over a 50 baud telegraphic circuit.)

Finally on the left hand margin of the stamp there appears a strip of conventional radio circuit syphon recorder undulator tape (call "*ANDURATA*" as spoken by old time Japanese operators) again reproducing the old "KATA-KANA" code - reading "*KINEN*" - meaning, in Japanese "*Commemorative*".

The two line inscription in Japanese characters in the upper portion of the stamp translates into "International Electrical Communications Union Accession (or affiliation) 75 year commemoration". A very old Japanese Morse telegraph tape inker (with a "key on base") is depicted in the center of the stamp.

This stamp is generally considered to be the most unique ever issued from the standpoint of telecommunication code history.

ARMSTRONG

STAMP

How ironical it is that an American who probably contributed more to radio development than any other single person should be ignored by our Post Office Department. I am referring, of course, to Edwin Howard Armstrong.

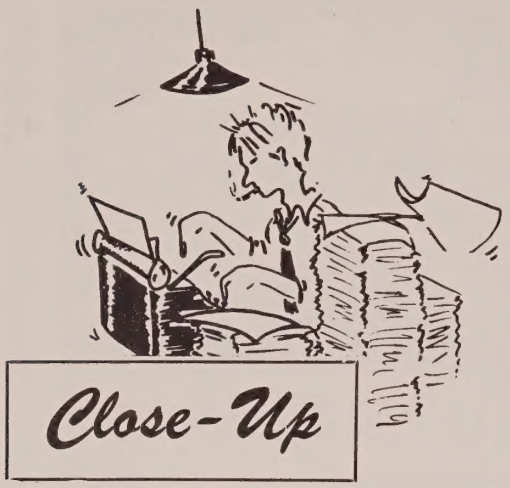
On several occasions, groups have, without success, petitioned the P.O. to issue a stamp in his honor. A different situation in other countries.... Czechoslovakia has issued an Armstrong stamp as well as one for Nikola Tesla !

Another interesting stamp was recently issued by the Vatican with portraits of Marconi and Pope Pius XI commemorating the 50th Anniversary of the Vatican's Radio station (1931-1981).

Many radio stamps are available. Last year Belgium celebrated its 50th Anniversary in radio with a stamp, and Argentina just released a stamp honoring amateur radio with a picture of a ham antenna and large letters "LU".

Tks Jose Garcia and WØEOP

FROM HEADQUARTERS



APPLIANCE OPERATORS

Vic Clark, W4KFC, wrote a provacative editorial in a recent issue of "Auto-Call" publication titled "Appliance Operators". Reading between the lines, I could see Vic was concerned about the inability of the average radio amateur to repair/service his miniaturized solid-state xmtr/rcvr.

He went further to say it wasn't usually advisable even if one could since most present-day equipment has a warranty and the manufacturer even recommends the owner to save the shipping carton so one could return it!

This is a sad state-of-the-art when an "advance" or "extra" is reluctant to touch his equipment. In the old days, the ave rage ham not only repaired all his gear but usually built it...

I would like to make a "tongue-in-cheek" proposal that all New Equipment Reviews in popular ham magazines also include a repair/maintenance code something like this:

"A"--most problems can be easily solved by the average ham.

"B"--most problems can be solved by a good technician.

"C"--almost impossible to repair even by a skilled technician.

Such a Code might prompt some manufacturers to design equipment for easy access and module/sectional diagnosis. I bet it would also influence many would-be buyers. Sure , I know the manufacturing cost would be greater...but do you have a better suggestion?

BACK ISSUES

Historical reference and good reading.....

The following OLD TIMERS BULLETINS remain in stock. Make out check to A.W.A. and mail to:

DEXTER DEELEY
8 Briar Circle
Rochester, N.Y. 14618

Vol. #	Vol. #	Vol. #	Vol. #
15 -1	17 -2	19 -4	21 -2
16 -2	~~17 -3~~	20 -2	21 -3
16 -2	18 -3	20 -3	21 -4
16 -4	18 -4	21 -1	22 -1

$1.50 each ppd.

~~12 -1~~	14 -4	19 -1 w/mono.
~~13 -1~~	15 -2	19 -3 w/mono.
~~13 -2~~	~~15 -3~~	20 -1 w/mono.
13 -3	17 -1	20 -4 w/mono.
~~14 -3~~	17 -4	$2.00 each ppd.

Vol. #	
11 -3	$4.00 ea.
18 -1	ppd.

Vol. 1 #2 and #3 Reprints for reference: 50¢ each

THEFT!

I received a list of 39 items stolen from the "Olden Year Musical Museum", Duncanville, Texas. The material consisted primarily of rare music boxes and early phonographs. The thief must have had a large truck! A rough guess would place the stolen merchandise well over $30,000. Now you know why some private collectors do not wish to have their name on a mailing/museum list....

ANTIQUE PRICE LISTING

Several have called my attention to a price list guide published by a well known couple who are considered authorities (?) on antiques. Their "listing" has been quoted as the "antique collector's bible". Here are some examples: Radiola III $150. A Westinghouse three tube receiver made in 1922 $50. What are your thoughts?

Along this same line, Dick Randall, K6ARE sent a clipping from his local newspaper: "For sale, Philco Cathedral radio $550. Good investment potential." (For whom?)

[Cont. on next page]

[Continued from previous page.]

Close-Up

WHAT IS IT?

The unit pictured in the March OTB on page 23, is a replica of the Eaton Circuit Driver, Type Triode "D", made by Wireless Speciality Apparatus Co., Boston, Mass. in 1920. Since there were less than 100 made, it is very rare. If anyone should find one or the schematic, I will be glad to know of it since I wish to make the replica functional. Two members wrote nice letters as to its identity but no schematic. Can you help him? Write: Selwyn Blake, K1CPW, 186 Summer St., Andover, Mass. 01810

A SUGGESTION...

It has been suggested there be a contest for fake reproductions. Several receivers with modern replacement parts have recently been sold as originals. The same with tubes. Such a contest would be a challenge to judges and most enlightening to collectors. This suggestion is not original since forgeries are quite common in all collecting fields. Earlier in the year there was an exclusive exhibit of fake paintings (New York City) and I understand one well known art dealer specializes in collecting forged paintings..

AMERICAN ABROAD

Early this summer, during a lunch with several collectors, the subject of exporting old radio equipment came up. Seems there are one or two pseudo-collectors who buy historic radio equipment in the States for re-sale in Europe at a handsome profit.

The fellows had no quarrel with buy-and-sell at a profit --- their concern was the exporting of historical American equipment. They felt one-of-a-kind and certain historical pieces should stay in the country of its origin.

They drew a parallel by pointing out that many "finds" may not be taken from certain countries of origin, mentioning artifacts of the Mayan and Aztec cultures as an example.

It was an interesting discussion. They tell me early radio equipment is scarce in most European countries because of the devastation of two wars and low production in the early days; hence, imports are readily marketed.

LEW MC COY, W1ICP

Congrats to "CQ" magazine for adding Lew McCoy to their staff. Lew has been frequently called "Mr. Amateur Radio". a most knowledeable author that writes material the average amateur can understand. Congrats also to Alan, K2EEK for grabbing Lew...

OUR COVER

There appears to be a difference of opinion. See page 4 of the June OTB.

The picture of the early airplane on the March OTB cover is NOT a Curtis but a Wright plane. Dick Aldridge says the picture was from a poster to promote interest in the U.S. Army service 1910-11 (Signal Corps). Curtis did not sell aircraft to the government until several years later. The wireless operator was an observer and was transmitting his obervations to a ground receiver. (See p. 4, June OTB)

--- 73, BK

AWA NET
L I S T

An up-to-date list of all AWA Net Members is now available. The list includes both CW & SSB participants and gives call, handle and QTH. Send SASE to:

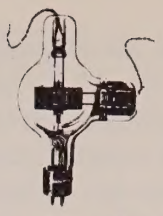
Ken Gardner
42 Oakdale Ave., S.
New Hartford, N. Y. 13413

A.W.A. BADGES

The large orange badges worn by members at radio meets are again available. The badge has a large plastic window and insert on which the wearer writes his name and other identification. A masthead and old radio call letters surround the opening. Available @ $1.25 at "meets" or $1.50 by mail ppd.

Lincoln Cundall
69 Boulevard Parkway
Rochester, N. Y. 14612

BRO. PAT HAS HISTORICAL TUBE



COVER STORY ....

Pictured is Charlie Atwater, NU-2JN (W2JN) with the transmitter he used to make the world's first ten meter trans-Atlantic contact with French EF-8CT. This history-making event took place in 1928 and was described in QST, Wireless World and other magazines.

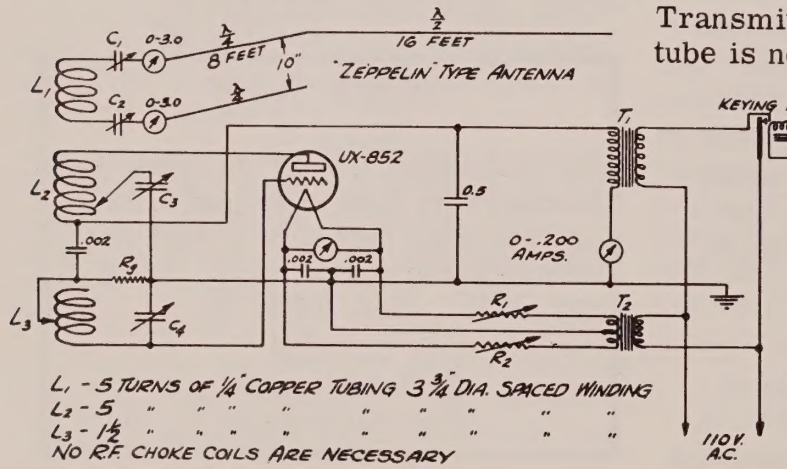
The tube in Charlie's transmitter was the then recently released RCA UX852, a high power tube with low inter-electrode capacity. The tube is now part of Bro. Patrick Dowd's (W2GK) historical exhibit at Manhattan College. Both tube and picture were a gift from Atwater just prior to his death.

The crude breadboard layout is a far cry from present-day solid-state construction and should be of interest to old time amateurs. Note the National condenser screwed to the side of the table and a Cardwell at center. A close look reveals the tube socket resting on a sponge (!) and a RCA filament transformer in the background.

1928 was an epoch year for 10-meter activity. The band had just been opened for amateur operation (commercial interests considered it of little value) and in short time amateurs were making trans-continental and trans-atlantic contacts and 6's were soon working ZL and VK.

Bill Eitel, 6UF was top-dog in the West, and 2JN and 8ALY in the East. Rochester AWA members have fond memories of the latter, pioneer Al Balling, 8ALY, who also used an 852 in a split-coil Hartley circuit. Both Bill (W6UF) and Al are still with us; however, Charlie (W2JN) became a Silent Key last year.

Tube collectors have difficulty finding 852's. Not so with the screen-grid version, the 860. The latter were used extensively in commercial transmitters during the 30's and were even available surplus after the war.

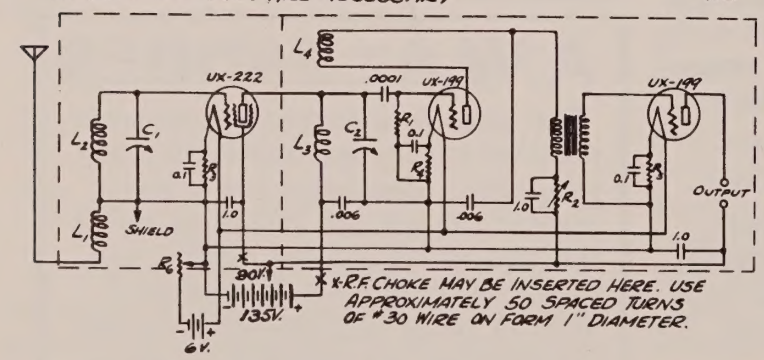


E_p - 3000 VOLTS A.C.
I_p - ANTENNA UNTUNED .035 AMP.
I_p - " TUNED .080 AMP.
R_3 - 20,000 OHMS WARD LEONARD
T_1 - THORDARSON 450 WATT PLATE TRANSFORMER.
T_2 - R.C.A. FIL. TRANSFORMER.
R_1 & R_2 - R.C.A. RHEOSTATS.

L_1 - 5 TURNS OF 1/4" COPPER TUBING 3 3/4" DIA. SPACED WINDING
L_2 - 5 " " " " " " " " "
L_3 - 1 1/2 " " " " " " " " "
NO R.F. CHOKE COILS ARE NECESSARY

C_1 & C_2 - G.R. 50 MMF. CONDENSERS.
C_3 - CARDWELL 150 MMF. DOUBLE SPACED.
C_4 - NATIONAL " " " "

Transmitter at U-2JN. The UX-852 tube is now part of W2GK's exhibit.



Circuit of 10 meter receiver used by Charlie Atwater....

BRASS SHIELD OF 1/16" THICKNESS
15" LONG
7" HIGH
8" DEEP

L_1 - 4 TURNS #16 WIRE 1" DIA.
L_2 - 4 TURNS " " " SPACED WINDING.
L_3 - 3 TURNS " " " " "
L_4 - 4 TURNS " " "
C_1 - 5 PLATE S.L.F. CARDWELL CONDENSER.
C_2 - 5 PLATE " " "

R_1 - 5 MEGOHM METALLIC RESISTOR.
R_2 - FROST 200,000 OHM VARIABLE RESISTOR.
R_3 - 10 OHM FIXED RESISTOR.
R_4 - 25 " " "
R_5 - 25 " " "
R_6 - 25 OHM VARIABLE RESISTOR LOCATED OUTSIDE OF SET.

A CHRONOLOGY OF ELECTRONIC HIGHLIGHTS

1877 - 1947
Highlights of the first 70 years of electronic development with emphasis on entertainment.

1877 - Thomas A. Edison invents the phonograph.

1884 - Paul Nipkow invents scanning disc for mechanical television.

1887 - Emile Berliner applies for patent on flat phonograph disc.

1895 - Guglielmo Marconi sends and receives wireless signals in Italy — Alexander S. Popoff accomplishes same feat in Russia.

1897 - Karl Ferdinand Braun, German scientist, constructs first cathode ray tube scanning device.

1900 - Prof. Reginald A. Fessenden transmits speech by wireless.

1906 - Lee deForest invents "audion", first three-element vacuum tube.

1907 - Boris Rosing in Russia and A. A. Campbell-Swinton in England simultaneously develop methods of image reproduction using electro-magnetic scanning.

1909 - Junior Wireless Club, Ltd. (later Radio Club of America) becomes first organization devoted to electronics.

1910 - Enrico Caruso broadcasts by radiophone from backstage at the Metropolitan Opera.

1912 - Institute of Radio Engineers is formed - Edwin H. Armstrong applies for patent on regenerative, or "feedback," circuit.

1915 - David Sarnoff proposes "radio music box" to Marconi Wireless Telegraph Co.

1916 - Armstrong applies for patent on superheterodyne circuit.

1920 - Broadcasting begins - first radio receivers advertised for sale.

1912 - First sports broadcasts — boxing, tennis and baseball.

1922 - First commercial broadcast (WEAF, New York).

1923 - National Association of Broadcasters formed — first transatlantic broadcast — Dr. Vladimir K. Zworykin applies for patent on iconscope or TV camera tube, and demonstrates complete TV system including kinescope or picture tube.

1924 - Western Electric Co. patents electrical sound recording — Radio Manufacturers Association, predecessor of EIA, is founded — loudspeaker replacing earphones.

1926 - AC radio receivers, designed to plug into wall outlet, introduced.

1927 - Philo Farnsworth applies for patent on electronic television system — automobile radios introduced — first coast-to-coast radio hookup — Bell Telephone Laboratories demonstrates wireless TV between Whippany, N.J. and New York.

1928 - First experimental TV station permits issued by government.

1934 - Federal Communications Commission established.

1936 - First regular television program service started in Britain.

1939 - Television introduced to American public at New York World's Fair — first TV sets offered for sale in U.S. — FCC orders study on final TV broadcast standards — first experimental FM stations go on air.

1941 - Commercial FM operation begins — commercial telecasting is authorized (later rescinded), 21 stations licensed.

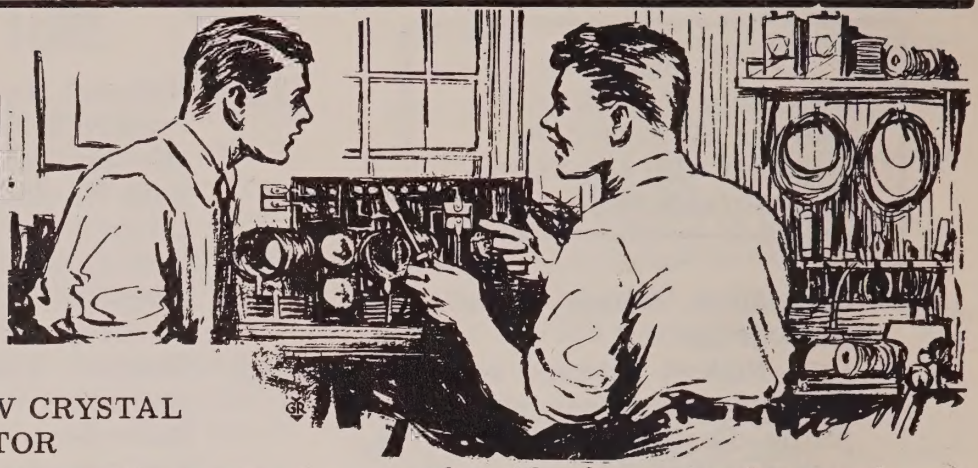
1945 - Nine commercial TV stations, 46 commercial FM stations and 943 AM radio stations are on the air as World War II ends — unlimited output of radios is permitted after war.

1946 - Postwar TV receivers introduced to public — magnetic wire recorders on consumer market.

1947 - Transistor demonstrated by Bell Telephone Laboratories.

WITH THE COLLECTORS

PROBLEM SOLVERS



RADIOLA I and V CRYSTAL DETECTOR

The AWA Museum recently acquired a Radiola I from Les Whitehead, AA1B. The set was in very good condition except someone had replaced the original crystal detector (the double pressure crystal type) with a conventional cats-whisker holder.

Checking Roland Matson's parts list, I found he makes the Radiola 5 detector which is very similar to the one used on the I. A quick change and AA1B's set looks like the original. (Roland Matson, 388 Concord Rd., Bedford, Mass. 01730)

CLOTH COVERED LINE CORDS

In restoring old AC sets, I find a fair percentage have defunct cloth-covered 110 volt line cords -- either frayed, dis-colored or the rubber insulation is shot. Under no circumstances should one use modern plastic replacement cord if you want it to look right. A good source of cloth-covered wire available in finely woven brown or gold is:

Bob Goodman, 7943 Ponce Ave.
Canoga Park, Calif. 91304

[W2HYN]

Grid Cap Repair

When the grid cap of the tube comes off, it can be repaired in the following manner: Hold the cap in a pair of pliers. Clean the inside out and melt the old solder out of the hole in the top. Wind a piece of wire around the stub of the wire coming from the top of the tube. Push this through the hole left by the melted solder. Place a small lump of plastic wood inside the cap and press the cap down on the top of the tube. After the plastic wood is dry, cut the end of the wire off and solder it to the cap. Clean off the excess plastic wood, and the job is finished, putting a useless tube back into action.

STRAIGHTENING PANELS

All of us have run into a set with a warped bakelite panel. Believe it or not, these panels can be straightened. First, remove the panel from the set and clean off all dirt and grease. Then place the panel in an oven and heat to approximately 250 degrees F.

It does not take long for the panel to become hot at which point it becomes flexible. Clamp or using weights, press the panel flat and allow it to cool. After cooling, it will hold its new shape. In some cases, the panel will have to be warped slightly in the reverse direction to attain a flat surface when cool.

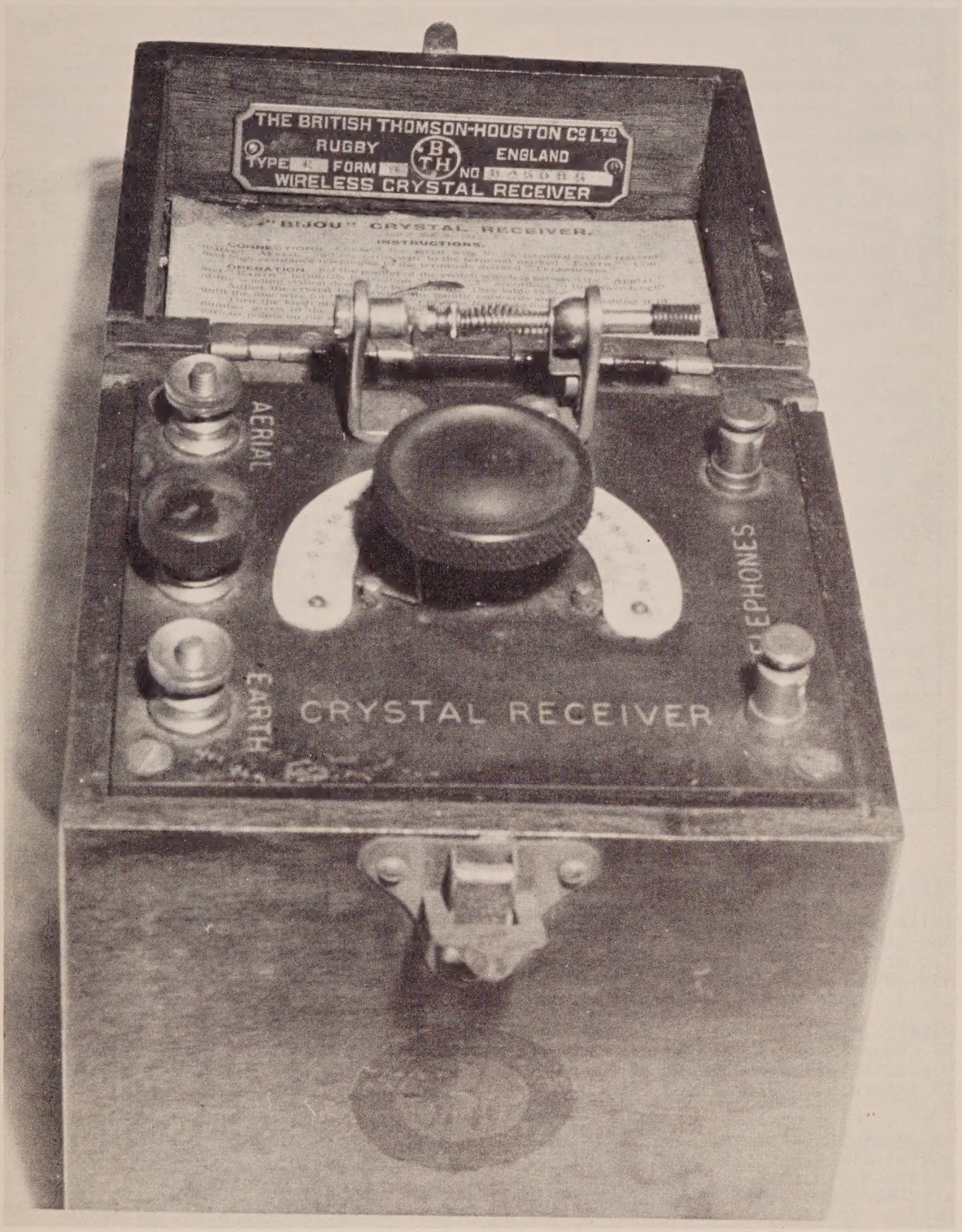
[Bill Hurni, W3HWT]

RUSTY CHASSIS

I have had difficulty removing rust and chemical corrision from the metal chassis of old AC receivers that had been exposed to dampness. The usual method of using emery paper and a brush is now been replaced with NAVAL JELLY which I purchased at a large hardware store.

There are two types of Naval Jelly: one for steel and the other for aluminum. I found the steel jelly also worked well with aluminm. Following instructions, you apply the jelly, wait 5 minutes and wipe off. [Bill Shaw]

THIS MONTH'S BROADCAST RECEIVER



Page 6, March '79 OTB tells of pioneers Thomson & Houston sending and receiving "wireless" signals in 1876 -- preceeding Hertz by 12 years. Soon after they formed an electrical supply manufacturing company which they eventually sold to the newly formed General Electric Co. in 1892. The original company did not lose its identity however, since it was established in England. Pictured is a rare crystal set owned by Doug Houston made sometime in the early 1920's to receive British broadcast stations.

OLD TYME HAM ADS

OLD TYME ADS are FREE to members interested in collecting and restoring historical radio equipment as a hobby. They are not to be abused.

RULES FOR ADS:

1. Ad must be written on separate sheet of paper-- not part of letter. Send SASE for acknowledgement.
2. Material must be over 25 years old and related to radio/television.
3. Give full name and address.
4. AWA will not print repetitious ads or ones indicating regular sale for profit.
5. The Association is NOT responsible for ANY transaction.
6. AWA retains the right to reduce size of ad if over 8 lines.
7. Only ONE ad per issue per member.
8. Deadline for ads is 6 weeks prior to mailing date:

March issue-- JAN. 15
June issue -- Apr. 15
Sept. issue -- JULY 15
Dec. issue -- OCT. 15

Important! To insure delivery, out-of-state mail should be sent one week prior to dates noted above.

Mail ALL ads to:

RICHARD RANSLEY
17 SHERIDAN ST.
AUBURN, N.Y. 13021

WANTED

--early magnetic phonograph pickup, RCA side wing model in grey crinkle finish. Also Pacent or other models from the late 1920s or early 1930s. Also Allied or Lafayette catalogs of 1931-1935 period. Charles Kaelber, P.O. Box 3335, Spring Hill, FL 33526

--table model cabinets for Philco 16B, 630. Need knobs for Philco 90,91,118B, 70,650,116,37-84,16B & 65. H.F.Schnur, 115 Intercept Ave., N. Charleston,SC 29405

--Kennedy 281 and amp, early Crosley, Federal,Grebe,Radiola,Zenith,Clapp-Eastham,Amrad,King and DeForest radios. Larry Babcock, 8095 Centre Lane, East Amherst, NY 14051

--AK75 (1930) Radio/Phono. Need following parts: Radio-complete brown dial/tone control switch assembly. Phono-volume control knob and the two baseboard needle wells. Can't find AK75 schematic. Lark Daniel, 50 Calhoun Rd., Pueblo, CO 81001 Tel. (303) 542-1238

WANTED

--information on the command sets 274N, ARC-5 and other command series. Specifically want to know how to activate 24V dynamotors. Any info would be appreciated. Louis Auerbach, 152-13 Roosevelt Ave., Flushing, NY 11354

--six-inch speaker with 2,500 ohm field coil. Send 3 postage stamps for list of 200 swap items and 75 wanted items. Rod Goodwin, Box 1854, Ponoka, Alberta, Canada, TOC-2HO

--microphones, vintage broadcast types as Western Electric 47A, 373, 632, RCA 74A, 77B/B1/C. Trades available have RCA 44BX, 50A, 88A, W-E 618,630 and 633. James Steele, 178 East 80th Street (#22B), New York, NY 10021

--copy of Candler System High Speed Typewriting Course. Bill Willmot,K4TF, 1630 Venus St., Merritt Island, FL 32952

--early AK braedboards and parts, Radiola III with four WD-11s, Crosley Super Trirdyn, large size Telefunken table radio in good working condition. James Notaris, 1100 Welsh Road, Ambler, PA 19002 Tel. (215) 646-3631 evenings

--Mercury 10-tube superhet, uses 215A tubes,Canadian made. I have for sale 21" Music Master horn in excellent condx. $275. No shipping. Can bring to Canandaigua. Al Jochem, 2047 College Ave., Quincy, IL 62301

--original power transformer for 1929 Radiola 67. It has these windings: three 2.5V, two 7.5V, one 1000V with center tap. Would also like complete chassis with good transformer. Bob Goodman, 7943 Ponce, Canoga Pk, CA 91304

--mirrored glass radios,blue,pink,etc. in any condition. Will trade early battery sets. Also need pictures or sales brochures of same, Sparton service and parts manual. Nate Alexander, Jr., Box 866, Milwaukee, WI 53201 Tel (414) 276-6773

--Grebe CR-5 and CR-9 also Crosley XJ sets. Please state condition and price or trades desired. Chet Wisner, W1VSR, 1014 Main St., Dalton, MA 01226

--schematic for Truetone model D-724 made in 1939-1941 period. Chassis model no. is 147E. Uses 6D6,6A7,42, 75,76,80 & 6G5. Don Dickey, 9130 12th Avenue South, Minneapolis, MN 55420

--National HRO Jr. with coils. State condition, price. Ship here via UPS. Will answer any offers. Ken Conrad, 5482 Crittenden Road, Akron, NY 14001

--Aeriola Senior case, complete with lid in excellent condition if possible. Rich Gagnon, 5725 Becker Drive, Rochester, MI 48063

WANTED

--"Radio" magazines in the years 1930 thru 1933, also want Citizen's Call-book and Scientific Digest for 1927, 1930 and 1931. L.P. Rayner, 5512 N. 71st Place, Scottsdale,AZ 85253

--charts for Zenith Transoceanic Model 7G605 (prewar).Knobs for Hallicrafter TV Model T-54,Brightness & on/off, vert. & Horiz. hold, etc., all the same.Also need schematic & battery cable plug for Zenith 3R. Jim Mason, 90 NW 150th Ave., Beaverton, OR 97116

--early FM tuners/receivers, prewar or post-war 42-50 mHz or 88-108 mHz. Also literature, etc. Will be at Canandaigua to examine/purchase. Al Germond, 211 Brenda Ln., Columbia, MO 65201 Telephone (314) 449-8035

--King Cole receivers and parts and literature from Anylite Electric Co. of Ft. Wayne, IN. Need certain AK breadboard parts & have other AK b/b parts to trade. Will be at Canandaigua. Jerald Hueber, 6316 Winnebago Ct., Ft. Wayne, IN 46815

--A-K model 40 power pack, also instruction sheets or copies of Mallory capacitor/resistor tester model CRT 1. Have for sale Radiola III w/o tubes, Hallicrafters S40B, Knight Star Roamer 5 band receiver with manual. Orville Nettifee, 2000 Cardinal Dr., Sioux Falls, SD 57105

--Riders TV Vol. 24. Have many of the other Riders radio and TV volumes for trade, or will purchase for cash. Alan Smith, Stonehedge, Lincoln, Mass. 01773 Tel. (617) 259-9351

--Philco model 18 or 118 chassis, speaker and knobs or any part of same or will buy whole radio. Joe Beach, 6515 Sunset, Garden City, MI 48135 Tel. (313) 261-7965

--Paragon DA2,RB2 units, any condition; panel, stage-switch or parts set for Zenith 4R (peephole version). Will swap 2 good bakelite base 201As for 1 brass base clear glass UV200/201. Rick Weibezahl, 305 Belvidere Ave., Washington, NJ 07882

--books on history of electricity, radio and electronics. H.R. Camenzind, 166 Hawthorne Ave., Los Altos, CA 94022

--any cathedral radio, working or not, good or poor condition. Also old battery radio audio transformers. C.G.J. Colodich, 23 Benson St., West Haverstraw, NY 10993

--lid and hinges for Crosley Super Trirdyn Special 3 tube reflex. Bruce Burkhardt, P.O. Box 1, Royal Oak, MD 21662 Tel. (301) 745-2826

--Jensen 18" Electrodynamic spkrs, working or not working. Henry Schwartzman, 123 Bridge St., Corning, NY 14830

WARNING!

Following is an excerpt from Tony Constable's letter (London) to AWA dated July 10:

"---a very beautiful Marconi Multiple Tuner has been stolen from the Marconi Company at Chelmsford -- it bears the serial number 8015 beneath the legend Marconi Wireless Telegraph Co., Ltd.

It was stolen on 25 February this year and it could possibly turn up in USA -- pass on this information to your colleagues and ask them to keep their eyes open..."

(If a suspicious Tuner appears, alert the Marconi Company or Tony Constable.)

There are only a couple Multiple Tuners in the United States. The purchaser of such a piece of equipment should insist on a thorough record of all previous owners and dates of sale, otherwise, he may find himself with a stolen piece of property.

Further, AWA understands that one or two individuals are currently making fake Marconi, Telefunken and de Forest equipment which is extremely difficult to tell from the original. Any purchase over $750. should be made with great caution-- you may have a forgery which you cannot authenticate or re-sell!

A letter (dated July 7) from John Stokes, NZVRS, Auckland, New Zealand, asks if AWA had a certain member in Forest Hills, N. Y..... The answer is emphatically NO! The party in question has made false claims, has been involved in questionable sales, has used different names in Forest Hills, Brooklyn and New York City.. Beware!

WANTED

--Radiotron Designer's Handbook, in usable condition. Send info & price to John Cirillo, 3548 Rita Lane, Fort Worth, TX 76117

--compact 3" utility scope in decent condition, hopefully with I.B. E.V. Brant, 2150 Wilson Ave., Apt. 205 St. Paul, MN 55119

--Hallicrafters P.C.230 & P.T.200AC. Also H.C.100. Clyde LaPearl, 5561 Hwy 12, Tipton, Mich. 49287

--tuning condenser for Crosley model 602 a.c. Bandbox receiver. Glen Buell, Box 21 R.R. #1, Crown Point, NY 12928

WANTED

--Western Electric double button microphone model 373-W. Picture available. Jack Shiels, 3212 Chestnut St., Murrysville, PA 15668

--AK model 53 power unit and speaker. Also any information about Waveland Radio Co., Chicago. Kent King, 5028 Dierker Road Apt. C2, Columbus, Ohio 43220

--small sized communication type sets. No junk. Please write with description and price. William Hemrick, Route 1, Terra Alta, West Va. 26764

--Hallicrafters HT-6 xmtr. plug-in osc. and pwr. amp coils for any-all ham bands needed to complete restoration. Craig Hinton, WBØIAH, 2668 N. Riviera Dr., White Bear Lake, MN 55110

--Fairchild model 295 recording/reproducer amplifier or Presto model EU7 recording amplifier. Have antique radios for trade.Need knobs,pointers, tap switches,rheostat resistance element for Zenith 4R. Gaylord Ewing, 990 Wegman Rd., Rochester, NY 14624

--complete Wired Wireless transmitter, type used to be used in college dormitories,buildings, in good and usable condition. No junk. Also, Mercury Super 10 receiver and Sargent MA 21 receiver and Guthman U-56 transmitter. David F. Thomas, 1212 E. Comanche, Tampa, FL 33604

--any empty (oak) cabinets that fit the Crosley VI or VIII portable models. Could also use incomplete sets, panels or parts for same. Need the 8-pin cable that connects the U.S. Army crank field generator to the radio/tel. unit. (1944). Please help. Dave Crocker, Tavern Path, Plymouth, MA 02360

--spinning disc TVs, parts, literature wanted for substantial cash or trade. Also interested in pre-1946 electronic TV sets. Arnold L. Chase, 9 Rushleigh Road, West Hartford, CT 06117 (203) 521-5280 (collect OK)

--E.H.Scott AC Symphony radio circa 1929. Also other pre-chrome Scotts, 40 tube Scott Quantra or parts of same. Radiola 26 brass tube cover. Top cash or trade. Joe Halser 2222 So. Kinnickinnic Ave., Milwaukee, WI 53207

FOR SALE/TRADE

--sets of Radio Engineering/Communications 1928-49, almost complete $250. Many Wireless Engineer(British) 1925-1955,some bound$5-25 per year.QST from 1920 to 1930 $350.,binders if you want. Later QST's too. Alan Douglas, Box 225,Pocasset, MA 02559

--1932 QST complete.Bound into hardcover book. Slipcase for volume advertising Walter Ashe Co. Best offer or trade for Civil War items. Stephen Smith, 5601 SW 76th St.,Miami,FL 33143

FOR SALE/TRADE

--fine collection of radio & television books, back to turn of century. Earlier telephone & telegraph books, misc. old electrical engineering treatises. 120 in all.Collection sold as a whole or negotiated groupings.Send $2. for list. S.E.Hernandez,River Road, RFD 1, Essex, Conn. 06426 Telephone anytime (203) 767-1410

--trade Raytheon "B" rare tube for other type rare tube for my collection. J. Wasiewicz, 229 Sarles Lane, Pleasantville, N.Y. 10570

--Radiola RA-DA,Hallicrafters SX99, two Hallicrafters S-94 with Hallicrafters manuals. Send SASE to David Shanks, 115 Baldwin St., Bloomfield, NJ 07003 Tel. (201) 748-8820

--Hammarlund HQ 120X w/manual in excellent to mint condition. $125 plus shipping. SASE for list of Radio Boys books. R.W. Randall, K6ARE, 1263 Lakehurst Road, Livermore, CA 94550

--General Radio freq. standard 1 to 1000 mc in six ft. rack, H-P 211A $25. H-P 205A $40.,H-P 400D $25.,Precision E200C $75.,Millen 90672 bridge,hundreds pf parts fpr transmitters. SASE prings details. Joe F. Keese, 47270 W. Main St., Northville, MI 48167

--A-K breadboard near mint,Radiola V, Synchrophase battery box,Brightson six UV-199 type tubes in box,Neutrowound 1927,Music Master,American Electric Burns,Radiola UZ1320 and AK horn speakers,Radio & Radio Age Mags.Want AA18 Amplion horn spkr,Dec.'24 Radio News. F.A.Paul,1545 Raymond,Glendale, Calif. 91201

--Government surplus equipment schematics and instructions $5. J.Cadrecha, 292 South Prospect, Burlington, VT 05401

--Collins transmitter 310-B,unchecked. Appears to be OK. Am interested in buying Hallicrafters receivers etc. E.H. Gordon, Box 834, Fieldale, VA 24089

--Pierson K B 81 Professional Comm. receiver and spkr made by Pierson Electronics of L.A. In working order last time used last year.Best offer or would prefer to trade for modern top line transciever. Ernest Staats, 105 Brae Court,Suisun City, CA 94585

--Davis Bros. table top crank phonograph $150 or trade for cathedral radio.Want Philco Model 90 cathedral. Charlie Fowkes, 4903 29th Ave. West, Bradenton,FL 33529

--many Riders radio manuals and early Sams for sale. Best offer. Eugene Falk, 11235 Catalina Ct., Cupertino, CA 95014

--radio magazines,misc. literature, catalogs,manuals, etc. Send large SASE for list. G.B. Schneider, 6848 Commonwealth Blvd., Parma Hgts.,OH 44130

THE GOOD OLD DAYS WITH AN AERIOLA SR. RECEIVER

FOR SALE/TRADE

--old style radio tubes from mid '20s thru early 30s. Western El. tubes,tube testers, WWI US Army service buzzer model 1914 by Stromberg-Carlson. Send large SASE for list. Herman Fothe, 10 Jackson St., Sloatsburg, NY 10974

--QSTs 1930 to 1970 complete, clean over 500 issues. $175. Anthony Kray, Main St., Putney, VT 05346

--Western Electric 4-D receiver with loop $450. plus shipping. Stuart Davis, W2ZH, 1149 Weber Street, Union, New Jersey 07083 Tel. (201) 686-4932

--Magnavox UC-8 TV kit new in boxes will fit Magnavox Radio-phono models 264,267,273,275,276. Is 105 series chassis with 17" rect. tube. Howard Plouf, 150 Old Fuller Road ext., Chicopee, MA 01020

--trade 800-B Scott chassis excellent condx (has replacement PM spkr) or 23 tube Scott Imperial very good chassis, with tweeters in fair Warrington cabinet for AM/FM Scott Phantom in comparable condition. Going to Canandaigua.Don Johnston, RR 1, Box 218A, Windfall, IN 46076 (317) 945-7735

--large collection of books and magazines. Send one large SASE for book list, one for magazine list. Want Magnavox tubes-duds OK,Norden Hauck parts. Steve Raymer, 190 E. Island Ave., Minneapolis, MN 55401

FOR SALE/TRADE

--Music Master horn,Sparton 46 flat top,Philco 84,AK42,Bestone V60,AK20, Radiola RC,Wireless Age Magazines, National NC33,old tubes.SASE for list 481. Want Pilot Wasp,Pilot AC Super Wasp & a junker Radiola RC for parts. David T. McKenzie, 170 West 53rd St., Hialeah, FL 33012

--QSTs 1920s $2. per copy,1930s $5. per 12 copies. Also 1940 thru 1970s $5. per year.Being sold by Gray Museum. Write Charles Williams, WA8AXQ, 400 Broadway, Cincinnati, Ohio 45202

--many cathedral and battery radios for sale.Also parts for 1920s recvrs and 1940s transmitters. Send SASE for list. Arthur Harrison, 1021 Falcon Rd, Columbia,MO 65201

--Farnsworth image disector tube 1933-1936, $350. Stephen Hofer, 3765 Niagra Drive, Lexington, KY 40503 Telephone (606) 622-4582 days only

--trade AK84 for AK287 or AK558.Send SASE for list of tubes for sale.Want RADA transformer,Radiola IV,RS & Tuska 225 parts sets and 50A1 tube. Merrill Bancroft, 169 S. Row Road, Townsend, MA 01469

--wireless transformer type RS Thordarson 1KVA 15,000 volt sec., 110 v. pri., &45.,AK 55C in Kiel table $290. Both good condition. Shipping extra. Bob Turner, P.O. Box 56, Hopkins, MN 55343 (612) 938-7809

Communications news

BRIEF REVIEW OF RECENT EVENTS

Stamp sells for $1 million

A five-cent "Blue Alexandria" stamp on the cover of a love letter mailed to an American girl in 1847 has been sold for $1 million, the highest price ever paid for a philatelic item, according to auctioneer, David Feldman. The cover, also known as the "Blue Boy," was bought Saturday by an unidentified "very well-known European collector" at a closed bid sale organized by Feldman's Geneva, Switzerland-based auction house. The previous world record price for a stamp was $850,000 paid for a "red 1-cent Guyana" from 1856 at a New York aution almost exactly a year ago. [June, 1981]

DEC. 22, 1965 Headlines

FRANK ANDREA DIES AT 77

F. A. D. Andrea, radio and TV pioneer who popularized the neutrodyne receiver in the '20's, died Dec. 22, 1965.

Born in Italy, he was brought to the United States at the age of 18 months by his widowed mother. At 11 he had to leave school to go to work, but he spent his nights studying mathematics and drafting. He started a small radio parts business in 1918 and began to produce radio kits. One of the first designs licensed under the Hazeltine neutrodyne patent, his FADA radio was probably the best known of the neutrodyne receivers.

He sold FADA in 1932 and retired, but started again in 1934 by founding the Andrea Radio Corp. That company sold the first TV kit in 1938, and is today a producer of high-quality television receivers.

Henri Busigneis Developed Radio Navigation Aids

Henri Busignies, 75, an electronic and communications engineer and chief scientist emeritus of the International Telephone and Telegraph Corp., died of a heart attack Friday at Antibes on the French Riviera, according to an ITT spokesman.

An internationally recognized authority on radio navigation and radio-direction finding, he held more than 140 patents in air navigation, radar and communications.

During World War II, he developed the high-frequency radio-direction-finding system known as "Huff-Duff," which was a vital factor in the war on enemy submarines.

(Copy from K3CL)

AT&T Files to Reduce Overseas Call Rates

AT&T has proposed a 35 percent reduction in rates for most overseas calls that would save US customers an estimated $425 million a year. The proposal, filed with the FCC, would be the largest such reduction since overseas telephone service began in 1927.

The company said the reductions would apply to the initial three-minute period rates for all customer dialed calls and to additional-minute charges for all overseas calls. The changes also apply to customer-dialed calls to Bermuda and 18 locations in the Caribbean.

The proposal does not apply to the initial period rates for calls that require special operator assistance. The new international dial rates would apply to all US customers, even if their telephones are not equipped for international dialing. Currently, more than half of the Bell System's customers can dial their own calls to 82 countries and areas.

AT&T asked the FCC to waive the 70-day waiting period normally required before a rate reduction can take effect. The proposal is intended to ensure that the company's interstate rate of return does not exceed the 12.75 percent recently authorized by the Commission.

Under the proposal, a three-minute, daytime, customer-dialed call from the US mainland to the United Kingdom will be reduced from $4.65 to $3. Similarly, calls to France and Germany, which now cost $6.15, will be reduced to $4.05. Calls to Japan, Australia and Brazil, which currently cost $7.65, would cost $4.95.

Over the past years, overseas calling has grown 20 percent or more a year, from 4.5 million in 1965 to 42 million in 1975, to 166 million in 1980. The Bell System uses about 56,000 nautical miles of ocean cable systems, including five transatlantic facilities. With about 8,600 international satellite circuits in service, the Bell System is the largest user of satellites for overseas communications.

Copy permission from Communication News (July, 1981)

HEADLINES: Feb. 25, 1957

'200-Mile Restriction on Early Space Trips'

San Diego, Cal. ----An Air Force expert on space medicine has recommended that the first flights of a manned space ship be restricted—as a humane measure—to an altitude of two hundred miles.

Col. Paul A. Campbell of the Air Force Office of Scientific Research at Washington, D. C., said that after the problems that crop up in such a round trip flight have been solved, the next step could be to emulate an earth satelllite.

"The duration could be one hundred trips around the the earth and return," Colonel Campbell said.

When space ship designers, engineers and medical officers have worked out the kinks that come with orbits around the earth, he said, they could turn their efforts toward a flight around the moon.

De Forest Doubts Flight Into Space

Washington ----One of America's most famous scientists dismissed as impossible Sunday the dream of travel into outer space.

Dr. Lee De Forest, known as the "father of electronics," predicted that man would never even reach the moon.

"Man," declared Dr. De Forest, "is inherently an earthy creature, and only his scientific imagination will ever make him a planetary emigrant."

Telegraphy Champ Dies

Littleton, Mass.----Theodore R. McElroy, 62, world champion telegrapher in the 1920-30s, died yesterday. During World War II, his McElroy Manufacturing Co. was a big supplier of code transmitters to the military service. McElroy held the telegraphers' world championship from 1920-33, lost it in 1934, then regained it in 1935 and held until the competition was discontined in 1939.

[Nov.20, 1963]

Museum News

Texas Broadcast Museum

Enclosed with the "Reproducer" (Vintage Radio & Phono Society) was a brochure describing the new Texas Broadcast Museum in Dallas, Texas. A very dedicated group of radio historians, radio/TV stations and businesses are behind the enterprise. It has the making of being an outstanding attraction for tourists and radio buffs. In addition to equipment displays, there are viewing areas, a historical phonograph and hi-fi room. The address is: 1701 Market St., Dallas, Texas 75202

KENT MUSEUM
Calais, Vermont

A museum in New England which may appeal to visitors is the Kent Museum, north of Montpelier, Vermont operated by the Vermont Historical Society. The building is a 1837 Tavern with early furnishings including a taproom, country store, etc. It originally belonged to radio magnate Atwater Kent's great grandfather. Bill Lightfoot, W1PEG, is assisting the curator in setting up a display of A-K products.

MC KINLEY MUSEUM

Hazlett Avenue, Canton, Ohio

The McKinley Museum is another museum featuring a radio display. AWA member Maurice Stahl states he plans to have as many operable exhibits as possible including a 3/4 kw. rotary spark transmitter. Floyd Lyons is assisting Maurice restoring and making various pieces of equipment, It promises to be an interesting place to visit.

FOOTHILL MUSEUM

Good news ! -- Foothill Electronics Museum at Los Altos (Calif.) is now back in operation with full backing from local electronic industries and the college administration. For a time the Museum's future was rather bleak as a result of California's Proposition 13 and other budget cuts. The Museum is the site of the annual AWA/CHRS Meet. (Thorn Mayes, W6AX)

What's Happening

AWA MEMBERS RECEIVE RECOGNITION

Ed Gable, K2MP, was the recipien t of the AMATEUR OF THE YEAR Award at the ARRL Atlantic Division Convention and Eric Shalkhauser, W9CI with a similar recognition at the Dayton Hamvention.

Ed has, through the years, made outstanding contributions to amateur radio in the Rochester area. He is employed at Harris RF Communication and is a collector of classic receivers.

Eric has written a series of excellent articles covering the history of amateur radio for "73" magazine. He is best remembered as past President of RME, a manufacturer of fine amateur receivers in the 30's and 40's.

W2AN on Repeater

Members visiting (or acting as guides) may now operate a Kenwood TR-7800 2-meter set at the Museum to check in on local repeaters. The TR-7800 was provided by W2ICE, antenna by W2VTR, power supply by W2HYN and setup by W2UTH. Normal operation is on the nearby 22-82 repeater maintained by W2UTH. The station is always in operation during museum hours with an alert every Wednesday at 7 PM.

NET OPERATION

Net activity has been, as usual, rather slow this past summer... Now that fall is here, let's start checking in on the various nets again. See Schedules on page 2.

IMPORTANT!

Notify Treasurer IMMEDIATELY of change in address. If you receive the OTB 3rd Class mail... it will NOT be forwarded! Issues not forwarded are available at $1. each...

THE MUSEUM

NEW EQUIPMENT in A.W.A. Museum

(sets, parts, magazines, books, etc.)

W1KA, W1VSR, W2IM, W2ZI, K2AH, W2BGN, K2YMM, W2DHV, W6SAI, W6CG, W7YI, W9NZH, VE3HC, Bob Ryan, Don Price, Roland Matson, P. Paret

MUSEUM ACTIVITY

The past summer has been one of much activity at the Museum with June the busiest. There were some weeks with school groups almost every day with the AWA Museum their annual field trip.

Summer is also a time for out-of-state tourists. The one signing the log from the greatest distance was Omar Shabsigh, YK1AO, a radio amateur/engineer from Damascus, Syria.

SILENT KEYS

Harold "Dick" Kaufman, K2DMR
Fellow IEEE, GE authority on electrical equipment protection.

Col. Erwin Weir, K2POI Pioneer in early communication, helped install Rocky Point station for G.E./RCA

Harold Bierbaum, WBØUTW

Stephen Closs, K2ATG

Haywood Parker, K2YMM

A.W.A. HISTORICAL MUSEUM

East Bloomfield, N.Y.
Bruce Kelley, Curator

Museum Hours:
Sunday ——— 2 to 5 P.M.
Wednesday ——— 7 to 9 P.M.
May through October

Open to groups by appointment
Tele. (716) 657-7489

Free Admission

Museum Telephone:
(716) 657-6260

AWA ACQUIRES YANKEE TRANSMITTER

AWA is now the owner of the radio transmitter used on board Capt. Irving Johnson's famous schooner "Yankee". Capt. Johnson gave the transmitter to the father of the donor, Peggy Paret, many years ago. The sale of property made it necessary for Peggy to find a new home for the equipment. The Director of the Mystic (Conn.) Seaport Museum recommended AWA.

The transmitter is divided into two sections each with a single 803 in the final to cover shortwave and medium wave bands. Range: 300 to 18,100 kc.

The ship's call before the war is listed as WCFT and WEXO in the 50's. The transmitter is a Navy Model TDE complete with huge motor-generator.

It would appear the TDE may have replaced the original set which is described on page 49, Nov. '36 QST consisting of a 801 driving four 801's. The original receiver was a Sargent Mod. 12.

The transmitter has seen operation in some of the world's most remote locations. Captain Johnson's voyages have been described many times in National Geographic magazines, seen on television and the schooner used as a prop in a Hollywood movie in the far Pacific. (Accession #81-21)